

**PB# 77-7**

**Suburban Builders**

Suburban Builders

~~77-7~~  
77-7

approved 9/78 SH.  
filed with T.C. offices  
4:15 pm  
SH.

received from  
Comptroller's office  
10/10/78

# GENERAL RECEIPT

3836

TOWN OF NEW WINDSOR  
558 Union Avenue  
New Windsor, N. Y. 12550

RECEIVED OF

*Fredric Warmers*

\$ *150.00*

*One hundred fifty and 00/100* DOLLARS

FOR

*Sub-division Fee Sub Builders Cornell Homes*

DISTRIBUTION:

*#177-7*

FUND	CODE	AMOUNT
<i>150.00</i>		
<i>CA</i>		

BY

*Charlotte Marcantonio*

*deputy*

TITLE

A Co., Rochester, N. Y. 14609



**Oxford Pendaflex**

CORPORATION

STOCK No. 753 1/3

MADE IN U.S.A.

**NOTICE OF PUBLIC HEARING**  
 NOTICE is hereby given that  
 a public hearing will be held  
 before the Town of New Windsor  
 Planning Board at the New  
 Windsor Town Hall, Union Ave-  
 nue, New Windsor, New York,  
 at 7:30 p.m. to consider the  
 application of Cornell Homes,  
 Inc., for a fifteen lot subdivision  
 of its property located on Route  
 94 adjoining and west of the  
 WEO Shopping Center.  
**JOSEPH TALLARICO**  
 Chairman  
 New Windsor Planning Board  
 Sept. 15

**State of New York**  
**County of Orange, ss:**

Hugh V. Nocton , being duly sworn deposes and  
 says that he is .....Principal Clerk..... of Newburgh-  
 Beacon News Co., Inc., Publisher of The Evening News-  
 a daily newspaper published and of general circulation in  
 the Counties of Orange and Dutchess, and that the notice  
 of which the annexed is a true copy was published .....  
 One Time.....  
 in said newspaper, commencing on the.....15<sup>th</sup>.....day of  
 ....September.....A.D., 19 72 , and ending on  
 the .....15<sup>th</sup>..... day of September..... A.D., 1972

**Subscribed and sworn to before me this**  
 .....18<sup>th</sup>..... day of September 19..72..

*Hugh V. Nocton*  
*Barbara J. Weidner*

.....  
**Notary Public of the State of New York, County of Orange.**  
**MY COMMISSION EXPIRES MARCH 30, 1974**



Date

6/14/72

Application No. \_\_\_\_\_

APPLICATION FOR SUBDIVISION APPROVAL  
Town of New Windsor, Orange County, N.Y.

Application is hereby made for subdivision of lands situated in the  
Town of New Windsor and described as follows:

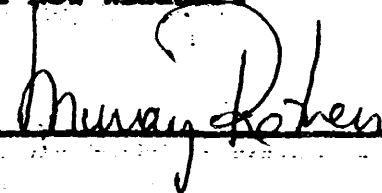
1. Name of subdivision FORGE HILL EAST
2. Location RT 94 NEW WINDSOR
3. Acreage 6 4. Number of lots 15 5. Zoned LB
6. Name & address of subdivider CORNELL HOMES INC.  
Suburban Builders
7. Name & address of record owner of land CORNELL HOMES INC.  
Box 231 Cornell HOMES
8. Present and intended uses VACANT - RESIDENTIAL

The undersigned applies for subdivision approval of the above described lands under the rules and procedure of the "Land Subdivision Regulations of the Town of New Windsor" as duly authorized by the Town Board of New Windsor, New York. Upon approval of the Preliminary Layout of said subdivision, the applicant agrees to install such utilities as are required and to complete the streets as finally approved by the Planning Board or in lieu of this to post a performance bond as set forth and provided in the "Land Subdivision Regulations". Copies of the Preliminary Layout are hereby attached.

Compliance with requirements shall be the sole responsibility of the applicant or his representative and it is suggested a copy of the Subdivision Regulations be obtained to avoid rejection of the plans. Seven (7) copies of the plans are required.

Fees are due and payable upon submission of the preliminary plans. All checks are to be made payable to the Town of New Windsor.

Signature of applicant



Preapplication approval \_\_\_\_\_

Preliminary approval \_\_\_\_\_

Final approval \_\_\_\_\_

Adopted 10/5/70

*Office of*  
**SANITARY SUPERINTENDENT**  
**Town of New Windsor, New York**

Tel. 561-2550

R. D. 4, Box 286  
Newburgh, New York 12550

October 17, 1972

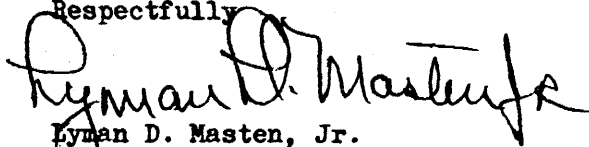
Mr. Joseph Tallarico  
Chairman, Planning Board  
555 Union Av.  
New Windsor, N. Y. 12550

Dear Sir:

I am in receipt of a letter from Mr. Murray Rothwein, dated October 13, 1972, relating to the intended sewer line to service sub-division on Route 94, which will include the servicing of three existing houses on Route 94.

Upon posting of necessary bond, to cover completion of said sewer line, he will have satisfied the requirements of the Sanitation Department.

Respectfully

  
Lyman D. Masten, Jr.  
Acting Sanitary Superintendent

LDM:kmd

BERNARD KESSLER, P.E.  
Consulting Engineer  
6 FLEETWOOD AVENUE  
Spring Valley, N.Y. 10977

914 356-0217

June 19, 1972

Town of New Windsor Planning Board

Re: Suburban Builders Subdivision (Cornell Homes)

The Plat should have the following additions and changes made prior to preliminary approval.

1. Add the zone district (LB).
2. Road profile minimum grade should be 1% rather than  $\frac{1}{2}\%$ .
3. Minimum lot size required is 12,000 sq. ft. Lots 3, 6, 7, 8, 11 and 13 do not conform to the minimum.
4. Minimum lot width required is 90'. Lots 6, 7, 8, 11 and 12 do not meet the minimum.
5. A side yard of 30' must be maintained between the existing block building on Lot 4 and the property line of Lot 3.
6. Add the road cross-section.
7. Indicate method or location of sewage disposal for Lot 15.
8. Indicate size of existing water main.
9. Show the width of proposed sewer and drainage easements.
10. The almost flat slopes, as indicated by the widely spaced contour lines, may lead to serious site drainage problems. Proposed final lot grades should be indicated if lots are to be filled.

*Bernard Kessler*

cc Richard G. Barger, P.E. & L.S.  
New Hackensack Road  
Wappingers Falls, N.Y. 12590

EXECUTIVE OFFICES & MODEL PARK  
RT. 94, NEW WINDSOR, N. Y. • 562-5300



*Att 4131*  
October 17, 1972

Joseph Tallarico, Chairman  
Planning Board Town of New Windsor  
New Windsor, N.Y.

Dear Mr. Tallarico:

At your suggestion, we have consulted with the Supervisor, Mr. Marsden and the head of the Sanitation Department, Mr. Masten. Satisfactory arrangements to provide sewer service to the three houses fronting Rt. 94 have been made. This work will be done at the time the new trunk sewer to service the proposed nine house subdivision is installed.

Our letter to the Planning Board dated October 13th indicated that we would screen off the existing warehouse from the view of the new residences by the planting of trees.

We would appreciate your early advice regarding preliminary approval of the subdivision. Additionally, since bad weather is imminent, we would like permission from the Planning Board for the issuance of building permits so that foundations may be constructed.

Very truly yours,

CORNELL HOMES Inc.

*Murray Rotwein*  
Murray Rotwein



Better Living Begins  
When You Own A New Home

EASEMENT

In consideration of the sum of One Dollar (\$1.00) lawful money of the United States, the receipt whereof is hereby acknowledged, the undersigned, CORNELL HOMES, INC, having its principal offices at Route 94, New Windsor, County of Orange, State of New York, hereinafter called the "Grantor," hereby grants unto the TOWN OF NEW WINDSOR, a municipal corporation having its offices at 555 Union Avenue, Town of New Windsor, Orange County, New York and Seymour Feinman and Elia Larocca, having principal offices located at 534 Blooming-Grove Turnpike, Town of New Windsor, Orange County, New York, hereinafter called the "Grantees", a perpetual right of way over the following parcel of land to enter upon and lay, install, operate, maintain, and replace sewer pipes and appurtenances for conveying sewage under the property of the Grantor, situate in the Town of New Windsor, Orange County, State of New York described as follows:

BEGINNING, at the point in the northwesterly corner of lot number 2 as shown on map number 2796, dated May 5, 1972, filed on June 5, 1972 in the Orange County Clerk's Office, Goshen, New York, being the lands presently owned by Seymour Feinman and Elia Larocca; thence on a course north 82 degrees 17 minutes west a distance of 100.0 feet; thence at right angles on a course south 5 degrees 40 minutes west a distance of 10.0 feet; thence at right angles on a course south 82 degrees 17 minutes east a distance of 100.0 feet; thence at right angles on a course north 5 degrees 40 minutes east a distance of 10.0 feet to the point and place of beginning.

BEING intended to describe a 10 foot wide strip across the rear of Lot number 3 as shown on the aforesaid map number 2796.

The Grantor reserves the right to use and enjoy the said premises except for the rights and privileges herein described and granted, provided that such use shall not interfere with or cause injury or damage to the said sewer line or appurtenances thereto.

This grant is made upon the express conditions and reservations which shall continue and run with the land:

(a) That the Grantee shall, at its own cost and expenses after completion of the original construction or the Completion of future repairs to the sewer line, restore the surface of said lands and premises to substantially the same conditions as before such construction or repairs.

(b) That the sewer line and appurtenances placed in or under said right of way shall, at all times, remain the property of the Grantee and under its control and supervision and the Grantor shall not interfere with or cause injury or damage to said sewer line or appurtenances.

This grant shall be binding upon the Grantor and the Grantee and their respective successors, heirs, or assigns.

IN WITNESS WHEREOF, the Grantor has caused its corporate seal to be hereunto affixed and these presents to be signed by its duly authorized officer the 13<sup>th</sup> day of October, 1972.

CORNELL HOMES, INC.

BY: Murray Rotwein  
MURRAY ROTWEIN  
PRESIDENT

STATE OF NEW YORK:  
:SS.  
COUNTY OF ORANGE:

On the 13<sup>th</sup> day of October, 1972, before me personally came Murray Rotwein, to me known, who, being by me duly sworn, did depose and say that he resides in Manhasset Neck, New York that he is the President of CORNELL HOMES, INC, the corporation described in, and which executed, the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said is such corporate seal; that it was so affixed by order of the board of directors of said corporation; and that he signed his name thereto by like order.

Steven I. Schechtman  
STEVEN I. SCHECHTMAN  
Notary Public, State of New York  
No. 41-8795780  
Qualified in Queens County  
Commission Expires March 30, 1974



October 13, 1972

Theodore Marsden, Supervisor  
Town of New Windsor  
555 Union Avenue  
New Windsor, N.Y.

Dear Mr. Marsden:

In connection with proposed subdivision of our property on Route 94, the following provisions are being made to permit the existing three dwellings fronting Route 94 to tie into the new sanitary sewer mains that will be installed.

1. Daniel and Peter Bloom - 534 Blooming Grove Tpk. A Y will be installed in the sewer main just beyond the first manhole in the new street off Route 94. Existing house sewer line comes out rear of dwelling, and can readily be rerouted to tie into the new Y.
2. Seymour Feinman and Elia LaRocca - 532 Blooming Grove Tpk. Existing sewer line comes out rear of house. A Y will be installed in the sewer main just ahead of the last manhole. An easement to both the Town of New Windsor and the property owners is enclosed. This will permit a tie-in to the new sewer main across adjoining property.
3. Steven and Antoinette Pester - 530 Blooming Grove Tpk. This property is still owned by Cornell Homes Inc. and will be deeded out subject to the easement mentioned above. This house will be tied into the new sewer when the mains are installed.

Additionally, screening in the form of lombardy poplars spaced 6 foot on center, will be planted to screen off the existing warehouse.

Very truly yours,

CORNELL HOMES Inc.

Murray Rotwein



copy: Planning Board  
Sanitation Department

Better Living Begins  
When You Own A New Home

BERNARD KESSLER, P.E.

*Consulting Engineer*

6 FLEETWOOD AVENUE

Spring Valley, N.Y. 10977

914 356-0217

August 14, 1972

Town of New Windsor Planning Board

Re: Suburban Builders Subdivision

This plan may now be granted preliminary approval as all the conditions set forth in my report dated June 19 have been met.

It should be noted that the road section must be changed to conform with the new suburban street specifications, i.e., curbs, 8" run of bank, and 6" pavement.

Health Department approval must be obtained for extension of sanitary and water facilities. Final maps should indicate sewer inverts and grades.

A handwritten signature in cursive script, reading "Bernard Kessler". The signature is written in dark ink and is positioned to the right of the typed text.



**NOTICE OF MAIL ARRIVAL  
OR ATTEMPTED DELIVERY**

ARTICLE NO. **924748**

**YOU MAY** COME FOR MAIL IN PERSON AFTER **M** (Date) **Mail is at**  
Bring this notice—Identification and signature required.  
REQUEST RE-DELIVERY—Notify your carrier or post office.

NAME AND ADDRESS **E. E. Yeoman**

ARTICLE MAILED AT **537 Bloom. Dr. Truk**

☐ RETURN RECEIPT REQUESTED ☐ REGISTERED ☐ INSURED ☒ CERTIFIED

☐ DELIVER TO ADDRESSEE ONLY ☐ SHOW ALSO ADDRESS WHERE DELIVERED

RECEIVED SIGN HERE **Mr. E. E. Yeoman**

BY **2**

POD Form Nov. 1969 **3849** DATE DELIVERED **9/12/72** DELIVERED BY (Signature) **Leo Smith**

**NOTICE OF MAIL ARRIVAL  
OR ATTEMPTED DELIVERY**

ARTICLE NO. **924746-LAR**

**YOU MAY** COME FOR MAIL IN PERSON AFTER **M** (Date) **Mail is at**  
Bring this notice—Identification and signature required.  
REQUEST RE-DELIVERY—Notify your carrier or post office.

NAME AND ADDRESS **Mr. Ben Hutter**

**11. Horchman Blvd.**

ARTICLE MAILED AT **YONKON NY 12556**

☐ RETURN RECEIPT REQUESTED ☐ REGISTERED ☐ INSURED ☒ CERTIFIED

☐ DELIVER TO ADDRESSEE ONLY ☐ SHOW ALSO ADDRESS WHERE DELIVERED

RECEIVED SIGN HERE **Ben Hutter**

BY **2**

POD Form Nov. 1969 **3849** DATE DELIVERED **9/12/72** DELIVERED BY (Signature) **33**

**NOTICE OF MAIL ARRIVAL  
OR ATTEMPTED DELIVERY**

ARTICLE NO. **924623**

**YOU MAY** COME FOR MAIL IN PERSON AFTER **M** (Date) **Mail is at**  
Bring this notice—Identification and signature required.  
REQUEST RE-DELIVERY—Notify your carrier or post office.

NAME AND ADDRESS **E. A. Brophy, 537 Bloom. Dr. Truk**

ARTICLE MAILED AT **Newburgh NY**

☐ RETURN RECEIPT REQUESTED ☐ REGISTERED ☐ INSURED ☒ CERTIFIED

☐ DELIVER TO ADDRESSEE ONLY ☐ SHOW ALSO ADDRESS WHERE DELIVERED

RECEIVED SIGN HERE **J. Ann Brophy**

BY **2**

POD Form Nov. 1969 **3849** DATE DELIVERED **9/12/72** DELIVERED BY (Signature) **Leo Smith**

**924745**

<b>DELIVER ARTICLE TO</b>	ENTER NAME OF PERSON YOU AUTHORIZE TO RECEIVE THE MAIL	
<b>FORWARD TO ADDRESSEE AT</b>	ENTER FULL ADDRESS TO WHICH MAIL IS TO BE SENT	
SIGNATURE OF ADDRESSEE OR AGENT		DATE
<b>OFFICE RECORD OF DISPOSITION WHEN DELIVERY CANNOT BE MADE</b>		
<input checked="" type="checkbox"/> FORWARD TO ADDRESSEE <input type="checkbox"/> RETURNED TO SENDER (Name and Address) <b>113 3rd Int. Rd. 66027</b> <b>Lawrence, Kansas</b>		
<input type="checkbox"/> UNCLAIMED <input type="checkbox"/> UNKNOWN <input type="checkbox"/> RETURNED		DATE <b>9/12/72</b> BY (Signature) <b>33</b>

NOTICE OF MAIL ARRIVAL  
OR ATTEMPTED DELIVERY

COME FOR MAIL IN PERSON AFTER \_\_\_\_\_ M. (Date)

YOU MAY Bring this notice—Identification and signature required.  
REQUEST RE-DELIVERY—Notify your carrier or post office.

NAME AND ADDRESS  
*Mr. & Mrs. P. L. Roach*  
*2 Stone Lodge Lane*

ARTICLE MAILED AT  
**NEWBURGH, N.Y. 12550**

☐ RETURN RECEIPT REQUESTED ☐ DELIVER TO ADDRESSEE ONLY ☐ SHOW ALSO ADDRESS WHERE DELIVERED

RECEIVED SIGN HERE *Linko Roach*

BY *2*

POD Form 3849 Nov. 1969

DATE DELIVERED *9/12/72*

DELIVERED BY (Signature) *as*

NOTICE OF MAIL ARRIVAL  
OR ATTEMPTED DELIVERY

COME FOR MAIL IN PERSON AFTER \_\_\_\_\_ M. (Date)

YOU MAY Bring this notice—Identification and signature required.  
REQUEST RE-DELIVERY—Notify your carrier or post office.

NAME AND ADDRESS  
*Fred & Barbara Brown*  
*9 - Stone Lodge Lane*

ARTICLE NO. *079678*

☐ RETURN RECEIPT REQUESTED ☐ DELIVER TO ADDRESSEE ONLY ☐ SHOW ALSO ADDRESS WHERE DELIVERED

RECEIVED SIGN HERE *1 Mrs Fred Brown*

BY *2*

POD Form 3849 Nov. 1969

DATE DELIVERED *9/12/72*

DELIVERED BY (Signature) *as*

COME FOR MAIL IN PERSON AFTER \_\_\_\_\_ M. (Date)

YOU MAY Bring this notice—Identification and signature required.  
REQUEST RE-DELIVERY—Notify your carrier or post office.

NAME AND ADDRESS  
*W. A. Good*  
*13 Homestead Blvd*

ARTICLE MAILED AT  
**Local**

☐ RETURN RECEIPT REQUESTED ☐ DELIVER TO ADDRESSEE ONLY ☐ SHOW ALSO ADDRESS WHERE DELIVERED

RECEIVED SIGN HERE *Fred*

BY *2*

POD Form 3849 Nov. 1969

DATE DELIVERED *SEP 12 1972*

DELIVERED BY (Signature) *as*

NOTICE OF MAIL ARRIVAL  
OR ATTEMPTED DELIVERY

COME FOR MAIL IN PERSON AFTER \_\_\_\_\_ M. (Date)

YOU MAY Bring this notice—Identification and signature required.  
REQUEST RE-DELIVERY—Notify your carrier or post office.

NAME AND ADDRESS  
*B. N. Johnston*  
*560 Bloom St. York*

ARTICLE MAILED AT  
**Warburgh NY**

☐ RETURN RECEIPT REQUESTED ☐ DELIVER TO ADDRESSEE ONLY ☐ SHOW ALSO ADDRESS WHERE DELIVERED

RECEIVED SIGN HERE *1 B. N. Johnston*

BY *2*

POD Form 3849 Nov. 1969

DATE DELIVERED *9/12/72*

DELIVERED BY (Signature) *as*

**PREVIOUS  
DOCUMENTS  
IN POOR  
ORIGINAL  
CONDITION**



OFFICE OF THE ASSESSOR

TOWN OF NEW WINDSOR

Chairman  
Ellsworth E. Weyant  
555 Union Avenue  
New Windsor, New York 12550  
(914) 565-8808

Cornell Homes, Inc. Property

X Beaudin, Lawrence & Katherine  
RD#1  
Cold Brook, New York

924740

X Brown, Fred E. & Barbara  
9 Stone Ledge Lane  
New Windsor, New York 12550

079678

✓ Roach, Paul L. & Hisako  
7 Stone Ledge Lane  
New Windsor, New York 12550

079677

✓ Murray Development c/o Scott Schechtman  
~~158 Grand Street~~ 187 GRAND ST.  
Newburgh, New York 12550

✓ Good, Walter R. & Nancy L.  
13 Horse Shoe Bend  
New Windsor, New York 12550

924745

Fwd. to Kansas

✓ Kittler, Ben Jr. & Carol Ann  
11 Horse Shoe Bend  
New Windsor, New York 12550

924746

✓ X S & H Shopping Centers, Inc.  
% Goldsmith Company  
241 Main Street  
Hackensack, New Jersey 07601

079676

✓ Finklestein, Benjamin H.  
560 & 562 Blooming Grove Turnpike  
New Windsor, New York 12550

924747

✓ Reed, Charles & Adreene  
47 Willow Lane  
New Windsor, New York 12550

✓ X Kartiganer, Herbert L. & Majorie N.  
17 Hearthstone Way  
New Windsor, New York 12550

924632

✓ Yeoman, Clarence E. & Emily E.  
537 Blooming Grove Turnpike  
New Windsor, New York 12550

924748



OFFICE OF THE ASSESSOR

TOWN OF NEW WINDSOR

Chairman  
Ellsworth E. Weyant  
555 Union Avenue  
New Windsor, New York 12550  
(914) 565-8808

Cornell Homes, Inc. Property

1763

✓ Brophy, Ronald A. & Jo-Ann Sylvester  
533 Blooming Grove Turnpike  
New Windsor, New York 12550

924623

✓ Ridgecrest Baptist Church  
Route 94  
New Windsor, New York 12550

Respectfully submitted,

*Ellsworth E. Weyant*

ELLSWORTH E. WEYANT  
Sole Assessor  
Town of New Windsor

9-12-73



1763

OFFICE OF THE SUPERVISOR

TOWN OF NEW WINDSOR

Supervisor  
Theodore F. Marsden  
555 Union Avenue  
New Windsor, New York 12550  
(914) 565-8800

August 28, 1973

Mr. Matt Schleifer  
Health Department  
Goshen, New York 10924

RE: Cornell Development

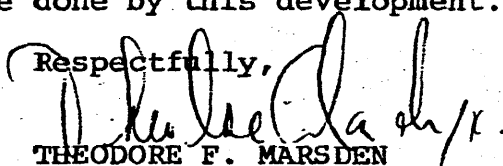
Dear Mr. Schleifer:

Sewer service is available to the above mentioned property through an easement owned by Mr. Rotwein and installation of the line will be done at the expense of the development.

This property is within Water District #5 and can be serviced either from Rt.94 or along the sewer easements indicated above.

Here again, all pipe work will be done by this development.

Respectfully,

  
THEODORE F. MARSDEN  
Supervisor

TFM/km  
cc: Planning Bd.  
Mr. Rotwein  
Water Dept.  
Sanitation Dept.  
Highway Dept.

(Suburban)

Date 9/1/72

Application No. \_\_\_\_\_

TOWN OF NEW WINDSOR PLANNING BOARD

APPLICATION FOR SITE APPROVAL

Name MURRAY ROTUNDA

Address 1 STERN DRIVE NEWBURGH N.Y.

1. Owner of the property CORNELL IDOMER INC.

2. Location of the property RT. 9A

3. Zone area L.B.

4. Nature of business PROFESSIONAL OFFICES

5. Lot size: Front 107 Rear 120 Depth 150

6. Building setbacks: Front yard 100 Rear yard 15

Side yards 25-35

7. Dimensions of new building 55x35

Addition \_\_\_\_\_

If addition, state front, side, rear of existing structure:

Compliance with requirements shall be the sole responsibility of the applicant or his representative and it is suggested a copy of the Zoning Ordinance be obtained, with particular attention to Article X to avoid rejection of the plans.

I do hereby affirm that all fees, permits and charges applicable under the laws and ordinances of the State of New York and the Town of New Windsor will be paid and that any expense for advertising of Public Hearing or meetings will be paid. Also, any legal or engineering fees for review of this project. Fees are due and payable upon submission of preliminary plans. All checks are to be made payable to the Town of New Windsor. Seven (7) copies of the plans are required.

Signature of applicant Murray Rotunda

Presubmission \_\_\_\_\_

Final approval \_\_\_\_\_

Adopted 10/5/70

Inquire Alt.



REGULAR MEETING OF THE NEW WINDSOR PLANNING BOARD

HELD ON SEPTEMBER 27, 1972

NEW WINDSOR TOWN HALL, NEW WINDSOR, NEW YORK

MEMBERS PRESENT: CHAIRMAN TALLARICO, LAWRENCE JONES, THOMAS DOWD, RAY VAN VOORHIS, THEODORE JARGSTORFF, AND JOSEPH LOSCALZO.

ALSO PRESENT: HOWARD COLLETT, BUILDING INSPECTOR, BERNARD KESSLER, ENGINEER, AND JOHN STANTON, ATTORNEY.

ABSENT: CHET PALOZZO

Chairman Tallarico: Called the Regular Meeting of the New Windsor Planning Board to order at 8:00 P.M.; and presided over same.

#1. On Agenda - Mayfair Funding Corp. - Public Hearing  
Cancelled

#2. On Agenda - Suburban Builders (Cornell Homes) Public Hearing - 8:00 P.M.  
Chairman Tallarico: Called the public hearing, of Suburban Builders, to order at 8:00 P.M.; and presided over same.

John Stanton, Planning Board Attorney, read the "Notice of Public Hearing" dated September 15, 1972; which appeared in the Evening News, was affirmed by Hugh V. Nocton, Principal Clerk of the Newburgh Beacon News Co., and notarized by Barbara Weidner on the 18th. day of September, 1972.

Chairman Tallarico: Collected eleven (11) signed registered receipts of Public Hearing Notification, one (1) marked unknown at address, and one (1) marked forward to addressee. (Total of thirteen (13) Certified Notifications of Public Hearing accounted for).

Chairman Tallarico: Made note that the list of abutting property owners from the Office of the Assessor, Town of New Windsor, also totaled thirteen (13).

Bernard Kessler, Planning Board Engineer, read the following report dated August 14, 1972:

This plan may now be granted preliminary approval as all the conditions set forth in my report dated June 19, 1972; have been met.

It should be noted that the road section must be changed to conform with the new suburban street specifications, i.e., curbs, 8" run of bank, and 6" pavement.

Health Department approval must be obtained for extension of sanitary and water facilities. Final maps should indicate sewer inverts and grades.

Suburban Builders Subdivision was represented by Steven Schechtman, Attorney, Murray Rotwein, Builder, and Kenneth Russ, Engineer.

Kenneth Russ, Engineer stated that: I understand there has been a question raised as to the manner in which we propose to sewer these lots. This particular parcel of property was approved, as an extension, I believe, to Sewer District #2, by the Town Board. The method in which we propose to, as far as sewer flow, was approved as we showed on the plaque.

Mr. Dowd: Stated that the water mains should be 8", instead of 6", as shown on the plans.

Mr. Schechtman: Stated that he will conform to the eight (8) inch water main requirement.

Mr. Jargstorff: Asked, What are the arrangements for Parklands?

Mr. Schechtman: Answered, we would be happy to make an offer for Parkland Fees, at the rate of \$100. per lot.

Chairman Tallarico: Opened the hearing to the public.

Ben Kittler, 11 Horseshoe Bend, stated that:

The easement is parallel to my southernly property line. The only three (3) trees that I have on the property are right in this area, and my only concern. I realize the fact that the easement is there and I have to abide by it. The only thing I am concerned with is the placement or replacement of these trees; because they will be destroyed during construction. I want some kind of assurance that these trees will be replaced, not the same size, (three 14" in diameter) but at least something that is comparable.

Mr. Schechtman: Stated that I assume when the property was purchased you knew the easement was there, and you knew the location of the easement.

Mr. Jones: Stated that the tree (3) trees were there when the property was purchased.

Mr. Schechtman stated that: Mr. Rotwein has agreed to put in three (3) trees of the same type; which of coarse, could not be of the same size.

Al Grassi, stated that: One of those three (3) trees belongs to me; but it is not on the easement. The three (3) trees are grouped together. As you cut through the easement; if two of them go, the roots of mine will go.

Mr. Russ, stated that: We may not destroy the trees, if we can possibly avoid it, we will. If not, all three (3) trees will be replaced by comparable trees.

Barbara Brown, stated that: I want to know what type of houses, and what price of houses will be built. My property borders the back of it, and I don't want the value of my house to go down.

Mr. Rotwein, Answered that: The value of the houses will consist with the prices of the houses in the area.

Barbara Brown, asked : What would your estimate be, as the value of the prices in the area?

Mr. Rotwein, Answered: In the middle thirties; or up to \$40,000. The houses will be various raised ranchers. (Bi-levels)

Barbara Brown, stated that: The lots are smaller than the lots we have on Stone Ledge Lane, so does that mean the houses will be smaller also, in proportion to that?

Murray Rotwein, answered: Not necessarily.

Barbara Brown, Asked: What would be the space in yardage between my property line and the property line of the houses behind me?

Mr. Russ, Answered: About 120' between the houses back to back. He further stated that this would be alot better than having a small shopping center there.

Barbara Brown, answered: I can agree with that.

Chairman Tallarico: Closed the Public Hearing at 8:35 P.M.

# County of Orange

COUNTY CLERK'S OFFICE

Drawer 330



Goshen, N. Y. 10924

CHARLES N. WINTERS  
County Clerk

Tel. (914) 294-5151

RICHARD E. RIKER  
Deputy County Clerk

Date June 14, 1972

Chairman of Planning Board  
Town of New Windsor

Dear Mr. Tallarico:

In compliance with the Town Planning Law, this is to notify you that the Plan of Subdivision for Cornell Homes, Inc. Town of New Windsor, dated 2/5/72 and approved by you on 3/22/72, was filed in our office on 6/5/72, as Map Number 2796 in Pocket 15 Folder A.

With kindest regards, I am

Very truly yours,

Charles N. Winters  
County Clerk

By: Shirley B. Hodson  
Chief Clerk

**WATER, SEWER, HIGHWAY REVIEW FORM:**

October 10, 1972

The maps and plans for the Site Approval \_\_\_\_\_  
Subdivision XXXXXXX as submitted by Suburban Builders  
for the building or subdivision of \_\_\_\_\_  
has been reviewed by me and is <sup>Conditional</sup> approved \_\_\_\_\_ disapproved \_\_\_\_\_

**If disapproved, please list reason.**

Bonds must be posted to insure completion of sewer mains according to the Town of New Windsor Code.

Contractor must provide the main sewer line plus the materials to the houses using material approved by the Town of New Windsor.

Contractor must provide sewer line to the existing homes known now or formerly as Cornell Homes, Inc.

Contractor must provide house connections to the sewer lines to the existing homes known now or formerly as Cornell Homes, Inc.

Contractor must secure sanitary permits and have each lateral inspected by the Sanitary Inspector of the Town Of New Windsor

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**HIGHWAY SUPERINTENDENT**

---

**WATER SUPERINTENDENT**

*Raymond D. Mastenfe*  

---

**SANITARY SUPERINTENDENT**



1763

# TOWN OF NEW WINDSOR

555 UNION AVENUE  
NEW WINDSOR, NEW YORK  
(914) 565-8550

AUG 28 1978

NEW WINDSOR PLANNING BOARD

August 28, 1978

Mr. Frederick Warmers  
P. O. Box 148  
Newburgh, N. Y. 12550

RE: CORNELL HOMES, INC. IN THE TOWN OF NEW WINDSOR  
ROUTE 94

Dear Fred:

This letter will advise you that in my opinion the final subdivision approval for the above-referenced subdivision in the Town of New Windsor runs with the land and may be utilized by the mortgagee of the property.

The subdivision will become final upon satisfactory presentation to me of required easements, which you are aware of, and water lines which must be looped in accordance with specifications of the Town of New Windsor Bureau of Fire Prevention.

On the basis of our recent conversations, I see no reason why the final subdivision approval cannot be granted by the Town of New Windsor Planning Board in the month of September, 1978.

Very truly yours,

PHILIP A. CROTTY, JR.

Attorney for the Town of New Windsor

PAC:pd

cc: Robert F. Rodgers, Fire Inspector  
Town Planning Board

Date

2/23/77

Application No.

17-7

## APPLICATION FOR SUBDIVISION APPROVAL

Town of New Windsor, 555 Union Avenue, Orange County, N.Y.

Tel: 555-8863

Application is hereby made for subdivision of lands situated in the Town of New Windsor and described as follows:

1. Name of subdivision SUBURBAN HOMES
2. Location RT. 94
3. Acreage 2
4. Number of lots 11
5. None
6. Name & address of subdivider SUBURBAN BUILDERS  
Box 4139 Newburgh NY
7. Name & address of record owner of land Cornell Home Inc.  
By SCOTT & SCHERMAN, ATTORNEYS 182 GRAND ST. NEWBURGH NY
8. Present and intended uses VACANT LAND -  
INTENDED USE SINGLE FAMILY RESIDENTIAL

The undersigned applies for subdivision approval of the above described lands under the rules and procedure of the "Land Subdivision Regulations of the Town of New Windsor" as duly authorized by the Town Board of New Windsor, New York. Upon approval of the Preliminary Layout of said subdivision the applicant agrees to install such utilities as are required and to complete the streets as finally approved by the Planning Board or in lieu of this to post a performance bond as set forth and provided in the "Land Subdivision Regulations". Copies of the Preliminary Layout are hereby attached.

Compliance with requirements shall be the sole responsibility of the applicant or his representative and it is suggested a copy of the Subdivision Regulations be obtained to avoid rejection of the plans. Seven (7) copies of the plans are required.

Fees are due and payable upon submission of the preliminary plans. All checks are to be made payable to the Town of New Windsor.

Signature of applicant

Murray Roberti

Adopted 10/5/73

No. 548

COPIES TO, HOUSES SOLOMONSON  
etc. EMBROIDERED PEEPS  
FREDRIC J. WARMERS  
SPECIAL

1 SEPT 13 1978  $\frac{1-103}{210}$

PAY TO THE ORDER OF TOWN OF NEW WINDSOR \$ 100<sup>00</sup>  
ONE HUNDRED AND 00/100 ————— DOLLARS



**BANKERS TRUST COMPANY**  
205 MONTAGUE STREET  
BROOKLYN, N. Y. 11201 **3**

*Frederic J. Warner*

1:0210001031:03003066452900

**PUCCO CHECKS OUT**



of CORDELL HOMES SUBDIVISION  
RECREATION FEES  
FREDRIC J. WARMERS  
SPECIAL

No. 547

PAY TO THE  
ORDER OF

TOWN OF NEW WINDSOR

\$ 1,000<sup>00</sup>

ONE THOUSAND AND 00/100

DOLLARS



BANKERS TRUST COMPANY  
205 MONTAGUE STREET  
BROOKLYN, N. Y. 11201

3

*Fredric J. Warmers*

RUOCO CHECKS 001

⑆0210⑉0103⑆03⑉30664529⑈

*Cocaine, Ly Hong Submarine*  
*at Submarine Law Firm*  
FREDRIC J. WARMERS  
SPECIAL

No. 549

SEPT 13 1978

1-103  
210

PAY TO THE  
ORDER OF

TOWN OF NEW WINDSOR

\$ 150<sup>00</sup>

ONE HUNDRED FIFTY AND 00/100

DOLLARS



BANKERS TRUST COMPANY

205 MONTAGUE STREET  
BROOKLYN, N. Y. 11201

3

*Fredric J. Warmers*

⑆0210⑉0103⑆03⑉30664529⑈

RUDECO CHECKS ONLY



1763

# TOWN OF NEW WINDSOR

555 UNION AVENUE  
NEW WINDSOR, NEW YORK

## TOWN OF NEW WINDSOR BONDING ESTIMATE SUBURBAN BUILDERS

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (DOLLARS)	AMOUNT (DOLLARS)
A.	Water Distribution System				
1.	8" Dia. A.C.P.	L.F.	673	18.00	12,114.00
2.	8" Valve	Ea.	1	600.00	600.00
3.	Hydrant Valve Assembly	Ea.	1	1,250.00	1,250.00
4.	Tapping Sleeve & Valve	Ea.	1	1,500.00	1,500.00
5.	House Services Complete (Dry Tap)	Ea.	10	375.00	3,750.00
B.	Sanitary Sewers				
1.	8" Dia. A.C.P.	L.F.	1,169	18.00	21,042.00
2.	Manholes	Ea.	7	700.00	4,900.00
3.	House Laterals	Ea.	10	200.00	2,000.00
4.	Connection to Existing Manhole	Ea.	1	600.00	600.00
C.	Storm Drainage				
1.	15" Dia. C.M.P.	L.F.	40	14.00	560.00
D.	Roadway Items				
1.	R.O.B. Subbase (15" Deep)	L.F.	777	5.00	3,885.00
2.	Surfacing	L.F.	777	14.00	10,878.00
3.	Curbing	L.F.	1,492	4.50	6,714.00
E.	Landscape Items				
1.	Topsoil and Seed within Roadway R.O.W.	S.Y.	574	5.00	2,870.00
F.	Miscellaneous Items				
1.	Street Signs	Ea.	1	75.00	75.00
2.	Lampost and Luminaires (Street Lighting)	Ea.	4	1,100.00	4,400.00

TOWN OF NEW WINDSOR  
BONDING ESTIMATE  
SUBURBAN BUILDERS

Estimated Bond	\$ 77,138.00
4% Engineering Inspection Fee	3,085.00
Total Estimated Bond	<hr/> \$ 80,223.00
Say	\$ 80,300.00

By: The Office of the Town Engineer  
October 5, 1978

REGULAR MEETING OF THE NEW WINDSOR PLANNING BOARD

HELD ON OCTOBER 25, 1972

NEW WINDSOR TOWN HALL, NEW WINDSOR, NEW YORK

MEMBERS PRESENT: CHAIRMAN TALLARICO, JOSEPH LOSCALZO, THEODORE JARGSTORFF, RAY VAN VOORHIS, LAWRENCE JONES, AND THOMAS DOWD.

ALSO PRESENT: JOHN STANTON, ATTORNEY, HOWARD COLLETTE, BUILDING INSPECTOR, AND BERNARD KESSLER, ENGINEER.

ABSENT: CHET PALOZZO:

Chairman Tallarico: Called the regular meeting of the New Windsor Planning Board to order at 8:00 p.m.; and presided over same.

#1. On Agenda - Suburban Builders

Mr. Schechtman, stated that: the existing three (3) buildings will be tied into the sewer lines, and fencing will be put in front of the existing warehouse and the W.E.O. side.

Chairman Tallarico: Reviewed the following correspondence:

1.) Sanitary Superintendent dated October 17, 1972

RE: Suburban Builders

Upon posting of necessary bond, to cover completion of said sewer line, requirements of the Sanitation Department will be satisfied (Three (3) existing homes on Route 94).

2.) Cornell Homes dated October 17, 1972

RE: Request the issuance of building permits, advice regarding preliminary approval, and stated that arrangements have been made to provide sewer service to the three homes.

2.) Cornell Homes To Supervisor dated October 13, 1972

RE: (Stated the provisions being made to tie (3) existing homes into the new sanitary sewer mains that will be installed. Additionally, screening in the form of lombardy poplars spaced six (6) foot on center, will be planted to screen off the existing warehouse).

An easement to both the Town of New Windsor and the property owners is enclosed. (Seymour Feinman and Elia Larcocca). This will permit a tie - in to the new sewer main across adjoining property.

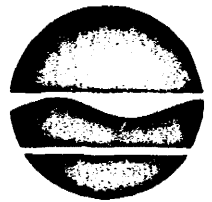
MOTION: By Mr. Loscalzo, seconded by Mr. Jones to grant preliminary S/D approval to Suburban Builders.

VOTE: All Yes, Motion Carried.

Mr. Schechtman: Requested the Board's authorization for building permits to be issued, to allow the builder to put in the foundations.

MOTION: By Mr. Loscalzo, seconded by Mr. Jones to authorize three (3) building permits for three (3) foundations, one (1) for each model; plus a \$500 bond, for each foundation, for the demolition expense, if necessary. Also with the understanding that the applicant will assume all risks.

**New York State Department of Environmental Conservation**  
202 Mamaroneck Avenue - White Plains, New York 10601



Peter A. A. Berle,  
Commissioner

July 6, 1978

Mr. William McDrilly  
Chumard and McDrilly, Consulting Engineers  
4 Fairlawn Avenue  
Middletown, New York 10940

Re: Suburban Builders Subdivision  
Sewer Plan Approval

Dear Mr. McDrilly:

This is to advise you that the engineer's report, plans and specifications submitted for the sewer main extension for the Suburban Builders Subdivision in the Town of New Windsor have been approved by this Department.

The following are conditions for plan acceptance:

1. That this approval letter shall be maintained on file by the applicant.
2. That the facilities shall be fully constructed in accordance with the engineering report, plans and specifications as approved.
3. That the construction of the facilities shall be under the supervision of a person or firm qualified to practice professional engineering in the State of New York under the Education Law of the State of New York, which supervision is the responsibility of the applicant.
4. That this office is to be notified when construction commences.
5. That this office is to be notified two (2) days prior to the commencing of the infiltration and/or exfiltration tests.
6. That leakage outward or the infiltration of the constructed sewer line shall not exceed 100 gallons per inch of sewer pipe diameter per mile per day for any section of the collection system between manholes and including manholes.

Mr. William McErilly

Page 2

July 6, 1978

7. That the professional engineer supervising such construction shall certify to this Department in writing, and to the applicant that the constructed facilities have been under his supervision and that works have been fully completed in accordance with the approved engineering report, plans and specifications.
8. That the acceptable results of leakage tests of the completed work shall be forwarded to this Department within fifteen (15) days after completion of the tests.
9. That this approval is based upon revised plan of March 9, 1978 and correspondence submitted by your firm on May 15, 1978.

Enclosed please find one (1) copy of the approved plans, engineering report and specifications. A copy is also being sent to the Orange County Health Department.

It is noted that the realty subdivision plans will be approved by this Department when a copy of the approved water supply plans (under review of the Orange County Health Department) are submitted.

Very truly yours,

*David T. Petruccelli*

David Petruccelli, P.E.  
Associate Water Pollution  
Control Engineer

DTP:fk

# County of Orange

COUNTY CLERK'S OFFICE

Orange County Government  
Center



Goshen, New York 10924

RECEIVED  
MAY 6 1979  
NEW WINDSOR PLANNING BOARD

JACK A. SCHLOSSER  
County Clerk

Tel. (914) 294-5151

THOMAS A. AMOROSI  
Deputy County Clerk

Date April 16, 1979

Chairman of Planning Board

Town of NEW WINDSOR

Dear Mr. Jones:

In compliance with the Town Planning Law, this is to notify you that the Plan of Subdivision for SUBURBAN BUILDERS Plan of Subdiv prepared for 2 sheets, Town of NEW WINDSOR, dated Sept. 12, 1972 and approved by you on March 14, 1979, was filed in our office on April 3, 1979, as Map number 4864 in Pocket 15 Folder A.

With kindest regards, I am

Very truly yours,  
JACK A. SCHLOSSER

  
County Clerk

By: Shirley B. Hadden  
Chief Clerk

jb



OFFICE OF THE TOWN ATTORNEY

TOWN OF NEW WINDSOR

555 Union Avenue  
New Windsor, New York 12550  
914-565-8550

May 24, 1977



1763

Mr. Murray Rotwein  
Cornell Homes, Inc.  
Route 94  
New Windsor, N. Y. 12550

RE: SEWER DISTRICT #22 EASEMENT

Dear Mr. Rotwein:

I have received a letter from Mr. John D. Dwyer of the Harold L. Kahn Real Estate organization concerning the Cornell Homes easement in Sewer District #22.

Mr. Dwyer advised me that you were not amenable to signing the easement.

I am aware that the Town Zoning Board of Appeals approved the variance for the Cornell Homes subdivision on Route 94. It appears that the action of the Zoning Board of Appeals might enable the Town Planning Board to favorably consider your request for the subdivision.

I am requesting therefore that you reconsider your refusal to sign the easement. The easement if signed will enable your proposed development to have sewers at a reduced cost than if the sewer district had to bear the expense of condemnation.

I hope you will reconsider and advise me that you are now prepared to sign the easement.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'Philip A. Crotty, Jr.'.

PHILIP A. CROTTY, JR.

Attorney for the Town of New Windsor

PAC:pr

cc: Chairman - Zoning Board of Appeals  
Chairman - Town Planning Board  
John D. Dwyer

RECEIVED

JUN 22 1978

ORANGE COUNTY  
DEPARTMENT OF HEALTH

SUBURBAN BUILDERS' SUBDIVISION

TOWN OF NEW WINDSOR

ORANGE COUNTY

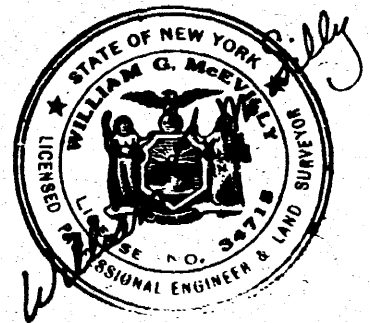
NEW YORK

TECHNICAL SPECIFICATIONS

SEWER & WATER MAINS

CHUMARD & McEVILLY  
Consulting Engineers  
4 Fairlawn Avenue  
Middletown, New York  
10940

ORANGE COUNTY DEPARTMENT OF HEALTH  
DIVISION OF ENVIRONMENTAL HEALTH



These plans for Suburban Builders' Subdivision  
Windsor, N.Y. for the Suburban Builders' Subdivision

PROJECT NO. 7653

are hereby approved pursuant to Part 5 of the New York State Sanitary Code,  
subject to the provisions of the certificate of approval issued this date.

ASSISTANT COMMISSIONER

July 7, 1978

TECHNICAL SPECIFICATIONS - 1

SUBURBAN BUILDERS  
SUBDIVISION  
TOWN OF NEW WINDSOR

ORANGE COUNTY

NEW YORK

TECHNICAL SPECIFICATIONS

ASBESTOS-CEMENT SEWER LINE

1. Material - Asbestos-Cement Pipe

Asbestos-cement sewer pipe, to be used in this work, shall be Class 3300. All pipe shall meet the requirements specified in ASTM Designation C248-65T. Type II, or latest revisions thereof, except as modified by these Specifications. Pipe and Fittings shall be manufactured in the United States by a company which has manufactured asbestos-cement pipe for not less than ten (10) years experience.

Coupling gaskets shall consist of a vulcanized rubber compound which is guaranteed by the manufacturer to be highly resistant to deterioration when in contact with sewage, and the requirements of the ASTM Designation 1869-63T, or latest revisions thereof, shall be complied with. Rubber rings shall be solid and confined in individual grooves.

General requirements:

a. Sizes: Asbestos-cement sewer pipe shall be supplied with nominal inside diameters of eight inches (8"). The standard length of 8" diameter pipe will be thirteen feet (13'). A maximum of 15 percent of the total footage of any one size and class for one order may be furnished in lengths of not less than 3' - 3". Short lengths shall be used to make connections to manholes or other rigid structures.

b. Joints: Asbestos-cement pipe joints shall be sealed with a coupling consisting of an asbestos-cement sleeve and two or more rubber rings supplied by the manufacturer. The rubber rings shall be placed so as to create a watertight joint when the pipe ends are inserted in the sleeve. Each pipe shall be properly machined on each end to automatically provide a definite end separation of pipes in each coupling assembly.

If asbestos-cement pipe connects to cast iron pipe, the joint shall be made as recommended by the manufacturer. Such connections shall not be used in the work until they have been approved in writing by the Engineer.

c. Marking Pipe: Each standard, random and short length of

pipe shall be marked by the manufacturer with the manufacturer's name, the trade name, nominal size, class, and date of manufacture. The Contractor shall provide the Engineer or Owner with the Manufacturer's certificate on pipe delivery.

## 2. Installation of Sewer Pipe

All asbestos-cement sewer pipe shall be installed in accordance with Manufacturer's Standards. Trench excavation and backfill to be made as specified for water main installation.

The bottom of trench shall be excavated where earth is suitable for good foundation to a depth of 4 inches below the outside of pipe, laid at grade established by the Engineer. Four inches (4") of R.O.B. Gravel shall be compacted under the pipe by use of a "Tee Bar". This is in accordance with Bedding Factor 1.5 as outlined by the pipe manufacturer.

Upon completion of the pipe installation with the said bedding then suitable select backfill shall be placed and tamped in accordance with backfilling procedure specified under water line installation.

Pipe shall be laid from the downstream manhole with bells laid upstream.

Jointing shall be accomplished in strict accordance with manufacturer's recommendations. Joints shall be cleaned before they are made. In bell and spigot pipe, the joint may be pushed home by hand or with a metal bar. If the metal bar is used, the bell of the entering pipe shall be protected with a block of wood to prevent damage to the pipe. Once the joint has been made, line and grade shall be checked. Pipe which does not conform to line and grade shall be ordered relaid.

Fittings shall be placed at the locations designed by the Engineer and in the same manner as described above or as detailed on the plans.

## 3. Line and Grade

The Contractor shall notify the Developer's Engineer a reasonable time in advance of his need for line and grade, and work shall not be started until control points for line and grade have been established.

TECHNICAL SPECIFICATIONS - 2A

R.O.B. GRAVEL

The material shall be R.O.B. Gravel, well graded from coarse to fine and of such size as will pass a two-inch (2") square sieve; 30% to 65% by weight, shall pass the  $\frac{1}{4}$ " square sieve; and not more than 5% by weight shall pass a No. 200 seive. Particles passing a No. 40 mesh seive shall have a Plasticity Index = 0.

It is the intent to provide gravel fill under A.C. pipe in accordance with previous specifications and to use as a back-fill only if ordered in writing.

Line and grade at the trench shall be maintained by the use of batterboards, spaced not over 50 feet apart. At least three (3) batterboards shall be maintained over the trench as all times. Lesser beam equipment and other approved methods, may be approved.

#### 4. Leakage and Leakage Tests

a. General: Upon the completion of construction of sewers and appurtenances, all pipe lines shall be thoroughly flushed out with water and prior to acceptance, the entire system, including house connections and manholes, shall be inspected and tested.

All sewers throughout the entire length of the sewer system will be tested for water tightness at the option of the Engineer. Two types of tests may be applied. One is an internal pressure test, and the other is an infiltration test. All sewers are subject to be tested by the internal pressure test. In addition to the internal pressure test, there will be required an infiltration test on all sewer lines that are laid below the ground water level.

The tests for water tightness will be made by the Contractor under the direction of the Developer's Engineer. The Contractor shall furnish, at his own expense, the necessary facilities for making the tests. The Engineer will have sole responsibility for establishing those section upon which leakage tests will be made. The Engineer will give the Contractor notice of the time and place when such tests will be made, which may be during a rainy season or period of high ground water.

b. Internal pressure tests: Where no ground water exists at the time of the tests, the sewers, manholes, and house connections shall be subjected to an internal water pressure test to the extent deemed necessary by the Engineer to determine their water tightness.

The lower end of the section shall be tightly plugged and the line filled with water. The line shall be vented to allow the air to escape from the pipe and the water level shall be brought to a point two feet (2') above the crown of the pipe, at its upper end at a manhole. The two feet (2') head of water at the upper end shall be maintained for at least one (24) hours. If deemed necessary by the Engineer, internal pressure tests will be made before backfilling of the section under test. Each joint and manhole will be inspected and any visible leakage shall be stopped by a means satisfactory to the Engineer.

c. Infiltration Tests: Infiltration tests shall be made in ground water conditions as a check for water tightness of the sewers after backfilling has been placed and sufficient time has elapsed to permit the ground water to rise to its normal level, at the option of the Engineer.

The test shall be made by using approved low head measuring weirs placed at the lower ends of the sections to be tested or by other approved method. The Contractor shall erect a temporary bulkhead to shut-off flow from above the section being tested, and shall provide pumps downstream of the measuring device to keep the system drained for the period of the test. The measurement of the water entering the section under test will be made over a period of time established by the Engineer.

d. Allowable leakage: The maximum allowable leakage in the sewer lines shall be 100 gal./mi./24 hr. per inch of internal diameter of the sewer. In the case of internal pressure tests, visible leakage at joints or through the pipe will not be permitted. Leakage tests to include the manholes and house connections.

Any section of sewer piping which does not meet the specified leakage tests shall be repaired by the Contractor at his expense.

## 5. Pre-Cast Manholes

a. Materials: Manholes shall be constructed of pre-cast concrete sections with rubber gaskets seals between sections. Pre-cast concrete manholes sections shall conform to the requirements of the "Tentative Specifications for Pre-cast Reinforced Concrete Manhole Risers and Tops." ASTM Des: C 478-64T, or latest revisions thereof. Pre-cast manhole barrels shall have an internal diameter of 48 inches and be manufactured in heights of 1, 2, 3 and 4 feet. All manholes shall be the approved equal of those manufactured by Hudson Valley Pre-cast Inc., Newburgh, New York, and shall have spread type footings on the base section.

Manhole bases shall be pre-cast. Where pre-cast design is used, the first riser section shall be cast integral with the base.

Manholes shall be constructed on a firm foundation. Where unsuitable foundation, six inches (6") of R.O.B. gravel shall be placed to establish a base suitable for construction.

In the event the Contractor excavates below the limits of the manhole foundation slab, R.O.B fill material shall be furnished and installed by the Contractor to provide a firm foundation at no additional expense to the Owner.

b. Joints: Pre-cast manhole sections shall have tongue and

## TECHNICAL SPECIFICATIONS - 5

groove joints formed in such a manner so that a rubber gasket can be applied. The sealing surfaces shall be smooth, concentric and free from imperfections which could impair sealing efficiency of the gasket. An annular space of  $\frac{1}{4}$  inch shall be maintained between tongue and groove surfaces to insure uniform fit.

A resilient joint shall be provided where the sewer pipe enters the manhole. The resilient joint shall be the approved equal of the "Resilient Flange Seal Joint" as manufactured by the Hudson Valley Pre-cast, Inc., company, Newburgh, New York. If a resilient joint is not provided at the manhole wall, the entering sewer pipe shall be supported on concrete cradle to a resilient pipe joint not more than 3 feet from the manhole. Only manholes as manufactured by Hudson Valley Pre-cast or approved equal with resilient seal joint shall be approved.

All rubber gaskets shall conform to the requirements of ASTM Designation C443-65 or latest revision thereof.

The gasket shall be lubricated with a soap base lubricant prior to final section assembly.

c. Manhole Steps: Manhole steps of aluminum alloy with drop step design shall be installed in all riser and cone sections. All steps shall be aligned to form a continuous ladder with steps equally spaced at 12 inch increments. That portion of the step imbedded in concrete shall be coated with zinc chromate primer.

d. Manhole frame and cover: Manhole caps shall be provided with a minimum entrance diameter of 24 inches. The casting shall be similar and equal to the No. 1007 as manufactured by the Campbell Foundry Company.



ASBESTOS-CEMENT WATER LINE

1. Material - Asbestos-Cement Pipe

Asbestos-cement pipe shall be Class 150 and shall meet Federal Specifications SS-P-351. It shall be equal to that manufactured by Johns-Manville, Keasbey and Mattison Company, Flintcote, or approved equal.

The six inch (6") asbestos-cement pipe length may be standard 13 feet lengths. Couplings furnished to consist of solid sleeves of the same material used for the pipe, with two solid rubber rings. Heavy tapped couplings shall be furnished at points where house services are to be installed.

Short adapter pieces shall be furnished to connect to all mechanical joint fittings.

a. Couplings: Asbestos-cement pipe couplings and adapters shall conform to the manufacturer's standard dimensions and tolerances. Each shall be properly machined on each end so as to facilitate joining the pipe sections without damage and to automatically provide a definite end separation of pipes in each coupling assembly. The pipe ends shall also be compatible with the coupling so as to provide confinement of the rubber rings.

Before shipping all materials shall be inspected by the manufacturer for conformance to his dimensions and tolerances including hydrostatic, flexure and crushing tests.

b. Markings: Pipe: each standard length and each random and short length of pipe shall be marked with the manufacturer's name, trade name, nominal size, class, hydrostatic test pressure, a "T" to signify it was tested, and date of manufacture.

Coupling Sleeve: Each coupling shall be marked by the manufacturer with the manufacturer's identification, the size, the class of pipe with which it shall be used, and with a "T" to signify it has been hydrostatically tested.

Rubber Rings: Each rubber ring shall be marked with the manufacturer's identification, the size, the year of manufacture and the classes of pipe with which it can be used.

2. Installation of Asbestos-Cement Water Pipe

Unless otherwise directed all pipe lines shall be installed with a minimum of four feet (4') cover over the top of the pipe.

Proper implements, tools, and facilities shall be provided and used by the Contractor for the safe and convenient prosecution of the work. All pipe, fittings, valves, hydrants, etc., shall be lowered carefully into the trench by means of the backhoe, a derrick, ropes, or other suitable tools or equipment, in such a manner as to prevent damage to pipe and accessories.

Before lowering, and while suspended, the pipe shall be inspected for defects. Any defective, damaged, or unsound pipe shall be rejected. All foreign matter such as dirt shall be removed from the inside of the pipe before it is lowered to its position in the trench. The pipe and accessories shall be kept clean during and after laying. The open ends of pipelines shall be closed by test plugs or other suitable means at all times when pipe-laying is not in progress. No trench water shall be permitted to enter the pipe.

The cutting of pipe for inserting valves, fittings or closure pieces shall be done in a neat and workmanlike manner without damage to the pipe or lining, and in accordance with manufacturer's directions. Pipe shall be handled in such a manner as to avoid damage to the machined ends. When such damaged pipe cannot be repaired to the Engineer's satisfaction, they shall be replaced at the Contractor's expense.

a. Pipe foundation on unstable soil: When an unstable subgrade condition is encountered, and in the opinion of the Engineer, it cannot support the pipe, an additional depth shall be excavated and refilled to pipe foundation grade with run-of-bank gravel or other suitable material as required by the Engineer, to achieve a satisfactory trench bottom.

b. Pipe clearance in rock excavation: Ledge rock, boulders and large stones shall be removed to provide clearance to each side of, and below, all pipe and accessories. This clearance for pipe and accessories shall be six inches (6").

Sub-grade in rock trench: Excavations below sub-grade in rock or in boulders shall be refilled to sub-grade with material approved by the Engineer, and thoroughly compacted.

c. Jointing pipe: Each pipe joint shall be sealed with a coupling consisting of an asbestos-cement sleeve and two rubber rings. The machined ends of pipe to be jointed, the coupling grooves and rubber rings shall be cleaned immediately before assembling.

The coupling assembly shall be made as recommended by the manufacturer. The location of field-assembled rings shall be checked with a suitable gauge to verify that rubber rings are in the required position.

Pipe shall not be deflected either vertically or horizontally in excess of that recommended by the manufacturer.

Short adapter pieces shall be used for jointing to all Mechanical joint fittings. (See plans.)

Reaction or thrust blocking shall be applied at fittings. The design of concrete thrust blocking shall be 2,000 lb. concrete and as shown on the plans.

The complete installation shall be made in accordance with manufacturer's directions. The manufacturer's engineer shall provide instructions for laying and backfilling.

### 3. Valves and Valve Boxes

All valves shall be mechanical joint, double gate valves with "O" ring packing, designed for a water-working pressure of 150 psi, and shall be in full conformance with latest AWWA C-500 Spec. for "Gate Valves for Ordinary Water Works Service". All valves shall open as standard and Contractor shall confirm valve opening direction with the Engineer. All valves shall have square operating nut. They shall be the same, or equal to, those manufactured by Ludlow, Eddy, Wood, Kennedy, Mueller, Smith, or other well-known manufacturers of valves or approved equal, with lead tipped gaskets.

Valve boxes shall be a two-piece, cast iron, standard screw type, with cast iron cover of proper length for actual trench depth. Valve box covers shall fit flush with the outside casting rim; shall not rattle or rock; and shall be capable of removal with a bar or pick. Each cover face shall be lettered "Water" and have an arrow indicating the direction of opening.

### 4. Location and Installation of Valves

Valves shall be installed, in general, in locations indicated on the plans. At intersections of pipelines, the valves shall be as

close to the intersection (about three feet (3')) as is conveniently possible. A valve box shall be installed over each valve.

Valve boxes shall be installed in a manner so that no shock or stress shall be transmitted through the box to the valve, and shall be centered, and plumb over the operating nut of the valve with the cover flush with the surface of the finished pavement, or such other level as may be directed. See other items for adaptor pieces to connect valves to A.C. Mains, if connections are specified or indicated.

#### 4. Hydrants

Fire hydrants shall be in accordance with the latest AWWA Specification C-502 "Fire Hydrants for Ordinary Water Works Service". Each hydrant shall be equipped with two nozzles and one pumper connection of proper size to meet fireprotection requirements of the area. The nozzle and pumper threads and type of operating nut shall also meet these standards.

The hydrant shall open as standard, and the Contractor shall check with the Municipality, or Engineer, before ordering hydrant.

The hydrant furnished shall be for a trench depth of 5 feet from the ground line to the bottom of the six-inch (6") mechanical joint bell connection. All hydrants shall have a six-inch (6") mechanical joint connection and a valve opening of five-inches (5"). The hydrant shall be the same, or equal, to those manufactured by Eddy, Kennedy, or other well-known manufacturers of hydrants.

The hydrant furnished shall be true breakaway traffic type hydrant, the make to be approved by the Town Water Department Superintendent, for Town standards.

#### 5. Hydrant Installation

The hydrant shall be located as shown or as directed, and in a manner to provide complete accessibility, and also in such a manner that the possibility of damage from vehicles, or injury to pedestrians will be minimized. The plans show the approximate location of the hydrant. In general, hydrants shall be installed on the same side of the street as the main.

The hydrant shall stand plumb and shall be set to the established grade, as directed in the field, with nozzles at least

eighteen inches (18") above ground. Whenever a hydrant is set in soil that is pervious, drainage shall be provided at the base of the hydrant by placing coarse gravel or crushed stone mixed with coarse sand to a depth of at least six inches (6") above the waste opening in the hydrant and to a one-foot (1') depth around the elbow. Whenever a hydrant is set in clay or impervious soil, a drainage pit two feet (2') in diameter and three feet (3') deep shall be excavated below each hydrant and filled compactly with crushed stone mixed with coarse sand. The crushed stone shall be placed under and around the elbow of the hydrant and to a level of six inches (6") above the waste opening.

The branch valve and hydrant shall be restrained by installing 5/8" rods along each side of the pipe, as detailed on the plans.

The hydrant shall be painted a color, or colors, as selected by the District, when delivered from the manufacturer. The Contractor shall upon completion, repaint the hydrant completely with the same type of paint and the same color as the original shop painting. Paint to be approved by the Engineers.

Before acceptance of the work, the hydrant shall be operated to determine whether it is in a satisfactory working condition, and such tests as the Engineer may require in this connection shall be made by and at the expense of the Contractor. The Contractor shall provide protection for roads and grassed areas during testing.

## 7. Testing and Disinfection

### a. Hydrostatic Tests:

When a new main, or section thereof, is completed installed and ready to be tested, the Contractor, at his opinion, may either backfill up to the horizontal diameter of the pipe, or completely backfill the trench prior to testing the main.

Leakage and pressure tests shall be conducted in accordance with AWWA Specification C-600. The tests may be run simultaneously for a period of three (3) hours at 150 psi. Total leakage, when the main is tested at 150 psi, shall not exceed 0.19 gallons, per hour per inch diameter per 1000 feet of pipe length assuming 18" length of pipe.

All tests shall be made in the presence of and to the satisfaction of the Engineer. All joints that leak excessively shall be remade. All cracked or defective pipe or fittings shall be replaced and the test repeated until satisfactory results, within the specified limits, are obtained.

In the event that the trench has been backfilled and the leakage exceeds the rate specified, the Contractor shall excavate and replace the backfill and repair the leaks at his own cost and expense.

Furnishing and installing taps for testing shall be paid for under Item No. 5.

The Owner shall make available, at no cost to the Contractor, a sufficient amount of water for hydrostatic tests.

The Contractor shall furnish, install, complete with reaction blocking, necessary plugs and caps required for this operation. Main line valves shall be utilized wherever possible to segregate test sections except as directed by the Engineer. The Contractor shall furnish all test equipment, including pumps, gages, and meters. The test equipment shall be approved by the Engineer. Calibration tests shall be furnished. The cost shall be included in Item No. 1.

b. Disinfection of Pressure Water Pipelines

Disinfection of water mains shall be equal in substance to the Standards for Disinfecting Water Mains prepared by the American Water Works Association, C-601-68, noted herein as Detailed Specifications a. through i.

Upon completion of the disinfection process, the chlorine water mixture shall be flushed thoroughly from the system and samples for bacteriological examination shall be taken from the system, to assure that complete disinfection has been accomplished. Arrangements for bacteriological sampling and examination shall be made by the Contractor, with a recognized laboratory, meeting the New York State Department of Health's requirements for examination of water samples for bacteriological examination. Water Samples shall be taken at the locations selected by the Engineer. Results of laboratory tests shall be forwarded the Engineer. If tests are not satisfactory, the Contractor shall repeat the disinfection procedure. The

8. Backfilling

Backfilling prior to Pressure and Leakage Tests: Selected backfill material approved by the Engineer, not frozen and free

from rock, lumps of clay, large stones, boulders or other unsuitable substances, shall be hand deposited in the trench uniformly at both sides of the pipe line for the full width of the trench and to the horizontal diameter of the pipeline. This backfill material shall be tamped in 4-inch layers and shall be sufficiently damp to permit thorough compaction under and on each side of the pipe and joints to provide support free from voids.

• Run-of-bank sand or fine gravel shall be used for backfilling of the 6" main, unless otherwise authorized by the Engineer. This is to extend half way up the pipe. Such gravel shall also be used for filling above rock excavation, where directed.

A tamping bar shall be used to tamp 4" layers under the pipe so as to leave no voids. Manufacturer's directions to be followed.

Backfill-Joints to be Visually Inspected: Joints are to be exposed during test, for visual examination-additional selected backfill material shall be hand placed between pipe joints in order to hold the line securely during test. The average depth of material shall be 12 inches over the top of 8 inch and smaller pipe.

Backfill Procedure after Pressure and Leakage Tests: On Completion of pressure and leakage tests exposed couplings shall be backfilled with selected backfill, hand placed to a depth of 12 inches above the top of the pipe and couplings. The balance of backfill may be machine placed and shall contain no rock, stones or boulders larger than 8 inches in its greatest dimension, and shall be free from brush or any other perishable or objectionable matter that would prevent proper consolidation; or that might cause subsequent settlement. If the Engineer specified, this material may be compacted by tamping or by puddling or by flooding, in accordance with accepted practices. Wherever, in the opinion of the Engineer, surface settlement is not important, tamping, puddling or flooding may be omitted and the backfill shall be neatly rounded over the trench to a sufficient height to allow for settlement to grade after consolidation. When puddling, it is important that proper precautions be taken to prevent floating of the pipe when flooding the trench, and the Contractor shall be wholly responsible for damage resulting from neglect of these precautions.

Deficiency of Backfill, by Whom Supplied: Any deficiency in the quantity of material for backfilling the trenches or for filling depressions caused by settlement, shall be supplied by the Contractor.

The trench is to be levelled off at street grade

9. Disinfecting of water lines as per attached Detailed Specification 2 thru i.

HOUSE SERVICES

A. WORK DESCRIPTION

Under this item, the Contractor shall do all excavation and backfill work, and shall furnish all materials, labor, tools and equipment required to install house services from the main to the new curb stop location. This item shall include furnishing and installing the corporation tap, copper service pipe, and curb stop and box. The services to be located as designed by the Engineer.

B. CORPORATION STOPS

Corporation stops shall be standard waterworks stops similar or equal to the Mueller Style H-15020, or approved equal.

C. CURB STOP AND BOX

Curb stops shall be standard waterworks similar or equal to Mueller Style H-15200 for sizes up to one inch (1") and H-15201 for sizes greater than 1½".

Curb boxes shall be extension type, similar or equal to Mueller Style H-10314 for sizes up to one inch (1") and H-10386 for sizes greater than 1½". The word "water" shall be lettered on the cover.

D. COPPER TUBING

Copper service pipe shall be Type K copper tubing, annealed after B-88. All coupling required to join sections of tubing shall be furnished by and at the expense of the Contractor, and shall be similar or equal to the Mueller H-15400, three-parts union copper to copper.

E. INSTALLATION

In general, copper service pipe shall be installed at a depth of four feet (4') below finished grade. The copper tubing shall be attached to the corporation stop and curb stop in a manner satisfactory to the Engineer, and sufficient slack shall be left adjacent to the corporation stop and curb to prevent damage to the copper



tubing, by movement of the pipeline.

In making cuts in copper service pipe, a hacksaw, preferably, with a mitre box, shall be used to cut tubing. The tubing shall be reamed, and after placing the coupling nut on the pipe, the pipe shall be flanged, using a flanging tool designed particularly for this purpose.

The main shall be tapped at a point on the top of the main with a 90° elbow, in order that a flexible copper tubing can be laid in a goose neck position to take care of pipe movement. The work shall be done by skilled workmen. All taps to be installed in accordance with pipe manufacturer's directions, and allowing three threads of the corporation tap to be exposed. Taps and corporation stops shall be located at least 1'0" from pipe ends. Installation and blocking shall be as shown on Plan Detail.

Taps shall be made wet, after the main is tested for pressure and leakage.

Curb stops and curb boxes shall be installed on the property line, in such locations as are specifically directed by the Engineer, in the field at the time of construction. All curb boxes shall be set in a truly plumb position with the cast iron lid left flush with, or slightly above, the surface of the ground.

DETAILED SPECIFICATIONS- a  
AWWA STANDARDS FOR  
DISINFECTING WATER MAINS

**SEC. 1 - GENERAL**

It is the intent of this standard to present essential procedures for disinfecting new and repaired water mains.

**SEC. 2 - BASIC PROCEDURE**

The basic procedure comprises:

- 2.1 Preventing contaminating materials from entering the water mains during construction or repair, and removing by flushing materials that may have entered the water main.
- 2.2 Disinfecting any residual contamination that may remain.
- 2.3 Determining the bacteriologic quality by laboratory test after disinfection.

**SEC. 3 - SUPPLEMENTARY INFORMATION TO BE SUPPLIED BY PURCHASER**

When the disinfection of water mains is to be done under a separate contract, or as part of a contract for installing mains, the purchaser shall provide the following items of specific information in his supplementary specifications:

- 3.1 Standard of reference, that is AWWA C601-68.
- 3.2 Places where flushing may be done, rates of flushing, and locations of drainage facilities (SEC. 5 and Table 1).
- 3.3 Form of chlorine to be used (SEC. 6) and method of application (SEC. 7).
- 3.4 The number and frequency of sample for bacteriologic tests (SEC. 9).
- 3.5 Method of taking samples (SEC. 9.2).

**SEC. 4 - PREVENTIVE MEASURES DURING CONSTRUCTION**

- 4.1 Keeping Pipe Clean and Dry. Precautions shall be taken to protect pipe interiors, fittings, and valves against contamination. Pipe delivered for construction shall be strung so as to minimize entrance of foreign material. When pipe

## DETAILED SPECIFICATIONS- b

laying is not in progress, as, for example, at the close of the day's work, all openings, in the pipeline shall be closed by watertight plugs. Joints of all pipe in the trench shall be completed before work is stopped. If water accumulates in the trench, the plugs shall remain in place until the trench is dry.

NOTE: Delay in placement of delivered pipe invites contamination. The more closely the rate of delivery is correlated to the rate of pipelaying, the less this delay

If dirt that in the opinion of the purchaser's engineer or job superintendent will not be removed by flushing operations (SEC.5) enters the pipe, the interior of the pipe shall be cleaned and swabbed as necessary, with a 5 per cent hypochlorite disinfecting solution.

4.2 Packing Materials and Joints. No contaminated material or any material capable of supporting prolific growth of micro-organisms shall be used for sealing joints. Packing material shall be handled in such a manner as to avoid contamination.

Where applicable, packing materials must conform to AWWA standards. Packing material for cast iron pipe must conform to AWWA C600. Yarning or packing material shall consist of molded or tubular rubber rings, rope of asbestos, or treated paper. Materials such as jute or hemp shall not be used.

The lubricant used in the installation of sealing gaskets shall be suitable for use in potable water. It shall be delivered to the job in inclosed containers and shall be kept clean.

### SEC. 5 - PRELIMINARY FLUSHING

The main shall be flushed prior to disinfection. The sites and velocities of flushing shall be as specified in the purchaser's supplemental specifications.

NOTE 1: It is recommended that the flushing velocity be not less than 2.5 ft/sec. The rate of flow required to produce this velocity in various diameters is shown in Table 1. No site for flushing should be chosen unless it has been determined that drainage is adequate at that site.

## DETAILED SPECIFICATIONS- c

**NOTE 2:** Flushing is no substitute for preventive measures taken before and during pipelaying (SEC. 4) Certain contaminants, especially in caked deposits, resist flushing at any velocity. Further more, with diameters of 16 in. or more, even the minimum recommended flushing velocity of 2.5 ft/se is sometimes difficult to achieve.

TABLE 1

**REQUIRED OPENINGS TO FLUSH PIPELINES\***  
(40 psi Residual Pressure)

Pipe Size in.	Flow Required to Produce 2.5 fps Velocity	Orifice Size in.	Hydrant Outlet Nozzles	
	GPM		Number	Size in.
4	100	15/16	1	2½
6	220	1 3/8	1	2½
8	390	1 7/8	1	2½
10	610	2 5/16	1	2½
12	880	2 13/16	1	2½
14	1,200	3 1/4	2	2½
16	1,565	3 5/8	2	2½
18	1,980	4 3/16	2	2½

\* With 40 psi residual pressure, a 2½ inch hydrant outlet nozzle will discharge approximately 1,000 gpm and a 4½ inch hydrant nozzle will discharge approximately 2,500 gpm.

### SEC. 6 - FORM OF CHLORINE FOR DISINFECTION

The most common forms of chlorine used in the disinfecting solutions are liquid chlorine (gas at atomospheric pressure), calcium hypochlorite granules, sodium hypochlorite solutions, and calcium hypochloride tablets.

#### 6.1 Liquid Chlorine\*

**6.1.1 Packaging.** Liquid chlorine is packaged in steel cylinders usually of 100-lb., 150-lb., or 1-ton capacity.

**6.1.2 Use.** Liquid chlorine shall be used only when suitable equipment is available and only under the direct supervision of a person familiar with the physiological, chemical and

\*See B301-AWWA Standard for Liquid Chlorine.

physical properties of this element and who is properly trained and equipped to handle any emergency that may arise. Introduction of chlorine-gas directly from the supply cylinder is unsafe and shall not be permitted.

**NOTE:** The preferred equipment consists of a solution feed chlorinator in combination with a booster pump for injecting the chlorine-gas water mixture into the main to be disinfected. Direct feed chlorinators are not recommended because their use is limited to situations where the water pressure is lower than the chlorine cylinder pressure.

## 6.2 Hypochlorites\* \*\*

**6.2.1 Calcium Hypochlorite.** Calcium hypochlorite contains 70 percent available chlorine by weight. It is either granular or tubular in form. (Tablets are not allowed on this project) Calcium hypochlorite is packaged in containers of various types and sizes ranging from small plastic bottles to 100-lb. drums.

A chlorine water solution is prepared by dissolving the granules in water in the proportion requisite for the desired concentration.

**6.2.2 Sodium Hypochlorite.** Sodium hypochlorite is supplied in strengths from 5.25 to 16 per cent available chlorine. It is packaged in liquid form in glass, rubber, or plastic containers ranging in size from 1 qt. bottles to 5-gal. carboys. It may also be purchased in bulk for delivery by tank truck.

The chlorine-water solution is prepared adding hypochlorite to water. Product deterioration must be reckoned with in computing the quantity of sodium hypochlorite required for the desired concentration.

**6.2.3 Application.** The hypochlorite solutions shall be applied to the water main with a gasoline or electrically powered chemical feed pump designed for feeding chlorine solutions. For small applications, the solutions may be fed with a hand pump, for example, a hydraulic test pump. Feed line shall be of such material and strength as to withstand safely the maximum pressures that may be created by the pumps. All connections shall be checked for tightness before the hypochlorite solution is applied to the main.

\* See B300-AWWA Standard for hypochlorites.

\*\*See Foreword for precautions in handling and storage.

SEC. 7 - METHODS OF CHLORINE APPLICATION

7.1 Continuous Feed Method. This method is suitable for general application.

7.1.1 Water from the existing distribution system, or other approved sources of supply, shall be made to flow at a constant measured rate into the newly-laid pipeline. The water shall receive a dose of chlorine, also fed at a constant, measured rate. The two rates shall be proportioned so that the chlorine concentration in the water in the pipe is maintained at a minimum of 50 mg/l available chlorine. To assure that this concentration is maintained, the chlorine residual should be measured at regular intervals in accordance with the procedures described in the current edition of STANDARD METHODS AND AWWA M12 - Simplified Procedures for Water Examination. (See Appendix.)

NOTE: In the absence of a meter, the rate may be determined either by placing a pitot gage at the discharge or by measuring the time to fill a container of known volume.

Table 2 give the amount of chlorine residual required for each 100 ft. of pipe of various diameters. Solutions of 1 per cent chlorine may be prepared with sodium hypochlorite or calcium hypochlorite. The latter solution requires approximately 1 lb. of calcium hypochlorite in 8.5 gal. of water.

TABLE 2

CHLORINE REQUIRED TO PRODUCE 50 Mg/l CONCENTRATION IN  
100 FEET OF PIPE - BY DIAMETER

Pipe Size in.	100 Per Cent Chlorine lb.	1 Per Cent Chlorine Solutions gal.
4	0.027	0.33
6	0.061	0.73
8	0.108	1.30
10	0.170	2.04
12	0.240	2.88

7.1.2 During the application of the chlorine, valves shall be manipulated to prevent the treatment dosage from flowing back into the line supplying the water. Chlorine application shall not cease until the entire main is filled with the chlorine solution.

## DETAILED SPECIFICATIONS- f

The chlorinated water shall be retained in the main for at least 24 hours, during which time all valves and hydrants in the section treated shall be operated in order to disinfect the appurtenances. At the end of the 24 hour period, the treated water shall contain no less than 25 mg/l chlorine throughout the length of the main.

7.2 Slug Method. This method is suitable for use with mains of large diameter for which, because of the volume of water involved, the continuous feed method is not practical.

7.2.1 Water from the existing distribution system, or other approved source of supply shall be made to flow at a constant, measured rate (See SEC. 7.1.1 NOTE) into the newly laid pipe line. The water shall receive a dose of chlorine, also fed at a constant, measured rate. The two rates shall be proportioned so that the concentration in the water entering the pipeline is maintained at no less than 300 mg/l. The chlorine shall be applied continuously and for a sufficient period to develop a solid column or "slug" of chlorinated water that will, as it passes along the line, expose all interior surfaces to a concentration of at least 300 mg/l for at least 3 hours. The application shall be checked at a tap near the upstream end of the line by chlorine residual measurements made according to the procedures described in the Appendix.

7.2.2 As the chlorinated water flows past tees and crosses, related valves and hydrants shall be operated so as to disinfect appurtenances.

### SEC. 8 - FINAL FLUSHING

After the applicable retention period, the heavily chlorinated water shall be flushed from the main until the chlorine concentration in the water leaving the main is no higher than that generally prevailing in the system, or less than 1 mg/l. Chlorine residual determination shall be made to ascertain that the heavily chlorinated water has been removed from the pipeline.

### SEC. 9 - BACTERIOLOGIC TESTS

9.1 After final flushing, and before the water main is placed in service, a sample or samples shall be collected from the end of the line and tested for bacteriologic quality and shall show the

absence of coliform organisms. if the number and frequency of samples is not prescribed by the public health authority having jurisdiction, at least one sample shall be collected from chlorinated supplies where a chlorine residual is maintained throughout the new main. From unchlorinated supplies at least two samples shall be collected at least 24 hours apart.

NOTE: In the case of extremely long mains, it is desirable that samples be collected the length of the line as well as at its end.

9.2 Samples for bacteriologic analysis shall be collected in sterile bottles treated with sodium thiosulphate. No hose or fire hydrant shall be used in collection of samples. A suggested sampling tap consists of a standard corporation cock installed in the main with a copper tube gooseneck assembly. After samples have been collected the gooseneck assembly may be removed, and retained for future use.

#### SEC. 10 - REPETITION OF PROCEDURE

If the initial disinfection fails to produce satisfactory samples, disinfection shall be repeated until satisfactory samples have been obtained. When the samples are satisfactory, the main may be placed in service.

#### SEC. 11 - PROCEDURE AFTER CUTTING INTO OR REPAIRING EXISTING MAINS.

The procedures outlined in this section apply primarily when mains are wholly or partially dewatered. Leaks or breaks that are repaired with clamping devices, while the mains remain full of water under pressure, present little danger of contamination and require no disinfection.

11.1 Trench Treatment. When an old line is opened, either by accident, or by design, the excavation will likely be wet and badly contaminated from nearby sewers. Liberal quantities of hypochlorite applied to open trench areas will lessen the danger from such pollution.

11.2 Main Disinfection



11.2.1 Swabbing and Flushing. The following procedure is considered as a minimum that may be used.

11.2.1.1 Swabbing with Hypochlorite Solution. The interior of all pipe and fittings used in making the repair (particularly couplings and tapping sleeves) shall be swabbed with a 5 per cent solution of hypochlorite before they are installed.

11.2.1.2 Flushing. Thorough flushing is the most practical means of removing contamination introduced during repairs. If valving and hydrant locations permit, flushing from both directions is recommended. Flushing shall be started as soon as the repairs are completed and continued until discolored water is eliminated.

11.2.2 Slug Method. Where practicable, in addition to the procedures of 11.2.1, a section of main in which the break is located shall be isolated, all service connections shut off, and the section flushed and chlorinated as described in Sec. 7.2, except that the dose may be increase as much as 500 mg/l and the contact time reduced to as little as  $\frac{1}{2}$  hour. After chlorination flushing shall be resumed and continued until discolored water is eliminated.

11.3 Sampling. Bacteriologic samples shall be taken after repairs to provide a record by which the effectiveness of the procedures used can be determined. If the direction of flow is unknown, samples shall be taken on each side of the main break.

#### APPENDIX CHLORINE RESIDUAL - DROP DILUTION METHOD

The drop dilution method of approximating total residual chlorine is suitable for concentrations above 10 mg/l, such as are applied in the disinfection of water mains or tanks. It is taken from AWWA M12-Simplified Procedures for Water Examination, p. 29.

##### Apparatus:

1. A graduated cylinder for measuring distilled water.
2. An automatic or safety pipet
3. A dropping pipet that delivers a 1 ml sample in twenty (20) drops. This pipet is for measuring the water sample and should not be used for any other purpose.

4. A comparator kit containing a suitable range of standards.

**Procedure:**

1. Ascertain the volume of the comparator cell and using an automatic or safety pipet add 0.5 ml of orthotolidine for each 9.5 ml of distilled water to be added.
2. Using a graduated cylinder, add a measured volume of distilled water.
3. With the dropping pipet, add the water sample a drop at a time, allowing mixing, until a yellow color is formed that matches one of the color standards.
4. Record the total number of drops used and the final chlorine value obtained.
5. Calculate the milligrams per liter residual chlorine as follows:
  - a. Multiply by 20 the number of milliliters of distilled water used in Step 2.
  - b. Multiply this product by the final chlorine value in milligrams per liter recorded in Step 4.
  - c. Divide the product found in step (b) by the total number of drops of water sample recorded in Step 4.

Date 2/8/72

Application No. \_\_\_\_\_

**APPLICATION FOR SUBDIVISION APPROVAL  
Town of New Windsor, Orange County, N.Y.**

Application is hereby made for subdivision of lands situated in the Town of New Windsor and described as follows:

1. Name of subdivision LANDS OF CORNELL HOMES INC.
2. Location RT. 96 New Windsor
3. Acreage 7.009<sup>±</sup> 4. Number of lots 4 5. Zoned LB
6. Name & address of subdivider CORNELL HOMES INC.  
RT. 96 New Windsor
7. Name & address of record owner of land SPRUE RS DBAKE
8. Present and intended uses ~~RESIDENTIAL~~ COMMERCIAL *SPS*

The undersigned applies for subdivision approval of the above described lands under the rules and procedure of the "Land Subdivision Regulations of the Town of New Windsor" as duly authorized by the Town Board of New Windsor, New York. Upon approval of the Preliminary Layout of said subdivision, the applicant agrees to install such utilities as are required and to complete the streets as finally approved by the Planning Board or in lieu of this to post a performance bond as set forth and provided in the "Land Subdivision Regulations". Copies of the Preliminary Layout are hereby attached.

Compliance with requirements shall be the sole responsibility of the applicant or his representative and it is suggested a copy of the Subdivision Regulations be obtained to avoid rejection of the plans. Seven (7) copies of the plans are required.

Fees are due and payable upon submission of the preliminary plans. All checks are to be made payable to the Town of New Windsor.

Signature of applicant *Harvey Roberts*

Preapplication approval \_\_\_\_\_  
Preliminary approval \_\_\_\_\_  
Final approval \_\_\_\_\_

Adopted 10/5/70

*Law Offices*

**SCOTT & SCHECHTMAN**

**H. MORTON SCOTT  
STEVEN I. SCHECHTMAN**

*182 Grand Street, Newburgh, N. Y. 12550*  
**914 565-5252**

*16 Court Street, Brooklyn, N. Y. 11201*  
**212 MAIN 4-1184**

March 22, 1972

Chairman, Planning Board  
Town of New Windsor  
Union Avenue  
New Windsor, New York

Re: Sub-division Application of  
Cornell Homes, Inc.  
Route 94, New Windsor

Dear Sir:

In connection with the above application of Cornell Homes, Inc., our office has been advised by Mr. Craig of the New Windsor Water Department that it will be necessary for the septic laterals for each of the three houses in question to be extended for fifty feet each, before he could approve the within application.

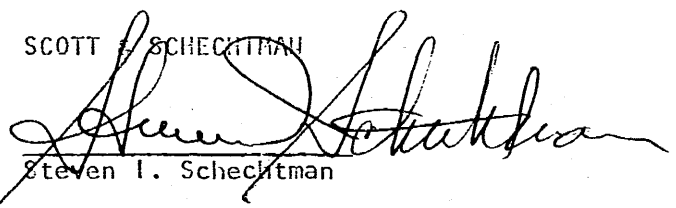
Our client has authorized us to represent to the Planning Board that the aforesaid extension of the laterals as required by Mr. Craig will be undertaken without delay.

We would therefore request that the application herein be approved with the provision that the above work be completed.

Very truly yours,

SCOTT & SCHECHTMAN

By:

  
Steven I. Schechtman

SIS/d1

BERNARD KESSLER, P.E.

*Consulting Engineer*

6 FLEETWOOD AVENUE

Spring Valley, N.Y. 10977

914 356-0217

March 20, 1972

Town of New Windsor Planning Board

Re: Cornell Homes Subdivision

The connections to municipal water and the existing  
septic field locations should be shown to insure that  
there are no encroachments.

Indicate the zone (LB) with the proposed use of the houses.

*Bernard Kessler*

NEW YORK STATE  
DEPARTMENT OF TRANSPORTATION



Region 8 Office: 4 Burnett Boulevard, Poughkeepsie, New York 12603  
February 8, 1974

Cornell Homes  
Box 1021  
Newburgh, New York 12550

re: Access Drive  
Route 94, SH 42  
Suburban Building Supply  
Town of New Windsor  
Orange County

To whom it may concern:

We were recently advised by our local maintenance office that a new roadway has been graded onto Route 94 for the purpose of providing access to the Suburban Building Supply Company. The fact that the grading and related work was performed within the State right-of-way is a violation of Section 52 of the Highway Law of the State of New York.

When this illegal work was first discovered by the Department's maintenance office situated in Newburgh, the necessary permit applications and related information were forwarded to Cornell Homes via a letter dated February 21, 1973. When no reply to the aforementioned letter was received, on October 18, 1973 a follow-up letter was sent via Certified mail to the same address, inquiring the status of the applications. Apparently, your firm refused to accept the October 18, 1973 letter and the Department was so notified by the post office department. Consequently, we have been asked to proceed with legal action to have the problem corrected.

After field reviewing the location, it was quite obvious that a new drive had been created to Route 94, and without authorization by means of a Highway Work Permit, this is a violation of Section 52 of the Highway Law. Under this section of law, the Department has the power to prosecute and the resulting penalty, if convicted, would be a fine of not less than \$25, nor more than \$1000, per day of violation. The Department has no desire to undertake such legal action, but unless the condition is corrected and legalized by a Permit, we will have no alternative.

The Department's records also indicate that we have had previous problems at this location. On September 21, 1973, we forwarded a certified letter to Suburban Building Supply advising the presence of two illegal advertising signs which were located within the State right-of-way and requesting their removal immediately. Subsequently, one sign was relocated but the second sign was removed by Department forces.

February 8, 1974  
page 2

It appears from the information which is available in this case, that your firm has chosen to disregard the laws of the State of New York. Section 52 of the Highway Law required the Department of Transportation to establish standards and procedures governing the construction of new access drives to the State highway, to provide the maximum protection possible for the motoring public through the orderly control of traffic movements onto and from our highways. Negligence or disinterest on the part of developers and property owners cannot be condoned and we would recommend prosecution to the fullest extent of the law.

In conclusion, we urge that you contact the residency immediately, within fourteen (14) days of the receipt of this letter, to apply for a permit to rectify the problem:

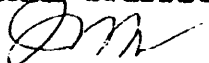
Mr. L.L. Greer, Resident Engineer  
112 Dickson Street  
Newburgh, NY 12550

Tel. #562-4020

We are also forwarding a copy of this letter to the Town of New Windsor to inform them of the problem and to our Albany office so that they will be prepared to take further action if the need develops. Hopefully, this will not be necessary.

Very truly yours,

R.M. GARDESKI  
Regional Traffic Engineer

  
By: J.W. WICKERT  
Asst. Civil Engineer

JW/smp

cc: W.G. Galloway, Dir., Traf. & Safety Div., 4th Fl, Bldg 7A  
~~Town of New Windsor~~-Mr. H. Collett, Zoning & Bldg. Inspector  
Suburban Building Supply  
L.L. Greer, Resident Engineer

112 Dickson Street  
Newburgh, NY 12550  
914-562-4020

June 27, 1974

Cornell Homes  
Box 1021  
Newburgh, NY 12550

RE: PROPOSED DEVELOPMENT ROAD TO ROUTE 94,  
SUBURBAN BLDG. SUPPLY, TOWN OF NEW WINDSOR

ATTENTION: MR. M. ROTHEIN

cc: R. M. Gardeski, Regional Traffic Group  
H. Collett, Zoning & Bldg. Inspector

Dear Sir:

In reference to our telephone conversation of June 25, 1974, the following is needed in preparation for a highway work permit:

1. A detailed plan indicating the construction of your roadway and drainage control.
2. An overall plan of your development. Depending on the size, we will also need anticipated traffic patterns, directional flow, related turning movements, peak hour generation and their relationship to existing conditions.

The above information will determine the need for additional improvements to Route 94, such as deceleration lanes, safety widening lanes and traffic control devices.

Please submit the above information for our review and comments as soon as possible.

Very truly yours,

Lawrence L. Greer  
Resident Engineer

BY: DOMINICK BELLO  
Assistant Resident Engineer

LLG:JAG:DB



No. 15

TOWN OF NEW WINDSOR  
ORANGE COUNTY, N. Y.  
OFFICE OF ZONING - BUILDING INSPECTOR

PARTIAL PERMIT

~~Temporary~~ permission for

CONSTRUCTION OF THREE FOUNDATIONS  
S. 12-13

is hereby granted to

CORNELL HINES

Owner of premises known as

SUBURBAN BUILDING

pending issuance of regular permit (s)

by this Department.

  
Building Inspector

Dated: Nov 7, 1972

REQUIRED

BOND IN AMOUNT OF 1500 - PER PLANNING BOARD  
MEETING OCT 25

**PREVIOUS  
DOCUMENT  
IN POOR  
ORIGINAL  
CONDITION**

Corneel Homes

*Parkland*

H. MORTON SCOTT, TRUSTEE  
182 GRAND STREET  
NEWBURGH, N. Y. 12550

899

3/23 1972 50-757  
213

PAY TO THE ORDER OF *Town Club - Town of New Windsor* \$400.00

*Four Hundred and No* DOLLARS

NEWBURGH BRANCH  
THE FIRST NATIONAL BANK  
OF HIGHLAND *Newburgh*, NEW YORK

MEMO *Re: Corneel Homes Inc.* *H. M. Scott*

01:0213007571: 2300084200411

H. MORTON SCOTT, TRUSTEE  
182 GRAND STREET  
NEWBURGH, N. Y. 12550

900

3/23 1972 50-757  
213

PAY TO THE ORDER OF *Town Club - Town of New Windsor* \$50.00

*Fifty and No* DOLLARS

NEWBURGH BRANCH  
THE FIRST NATIONAL BANK  
OF HIGHLAND *Newburgh*, NEW YORK

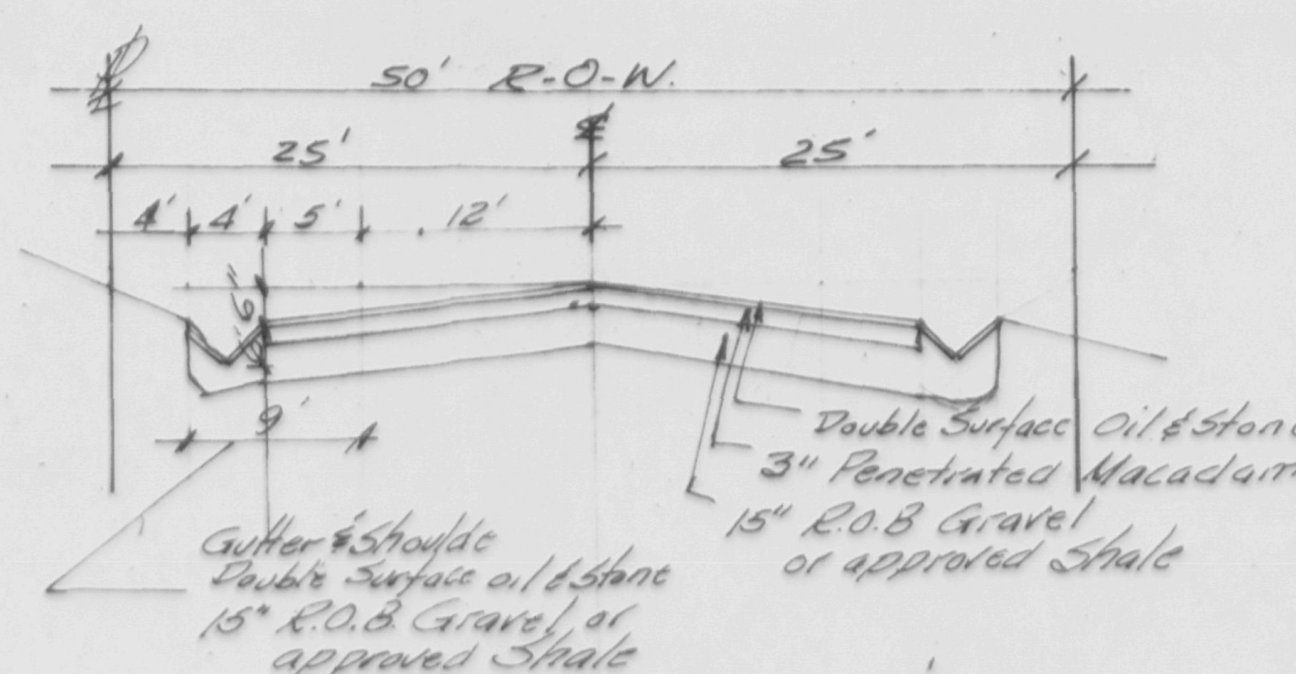
MEMO *Subdivision Fee Corneel Homes Inc.* *H. M. Scott*

01:0213007571: 2300084200411






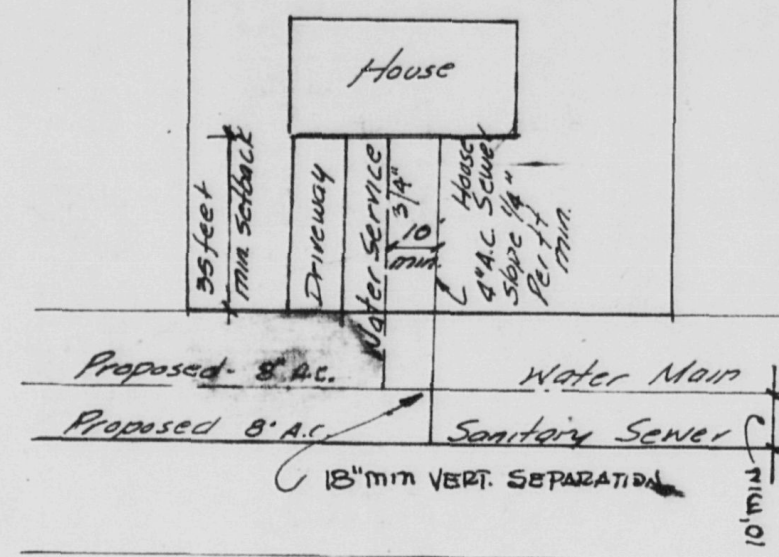
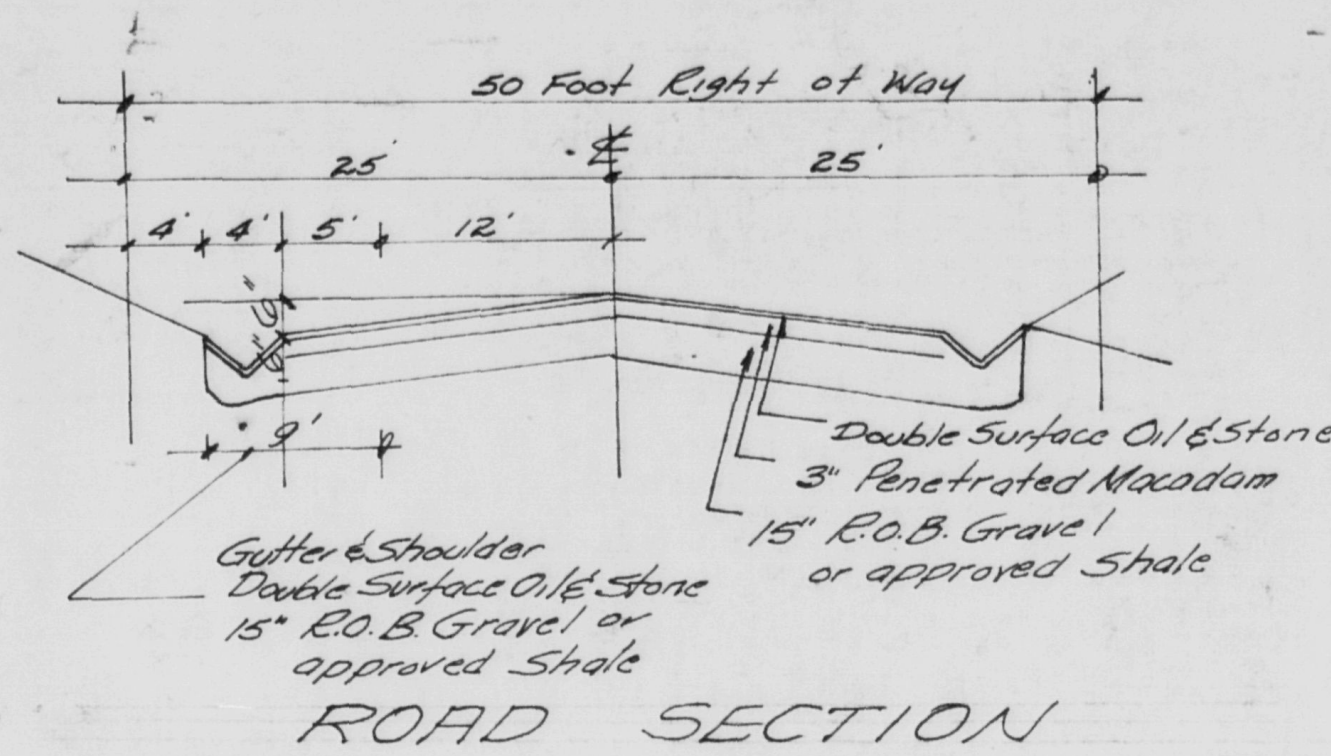
- 1) MINIMUM LOT SIZE: 12,000 S
- 2) MINIMUM FRONTAGE: 90 FT.
- 3) EXISTING ZONE: LB
- 4) NUMBER OF LOTS: 14
- 5) LOT AREA WILL NOT BE FILLED
- 6) TOTAL AREA: 5.977 AC.
- 7) CENTRAL WATER.
- 8) CENTRAL SEWERS.



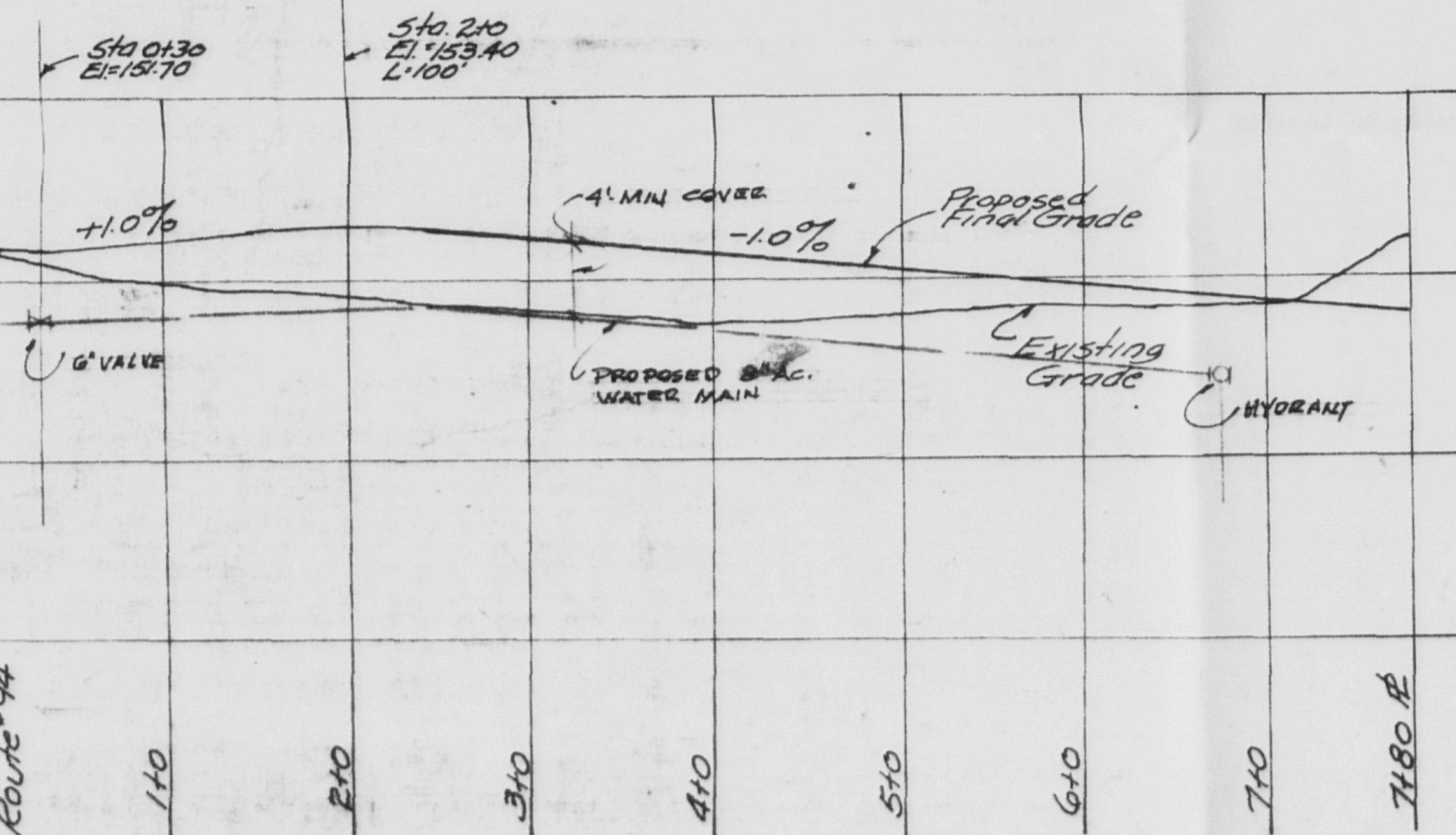
Area: 5.777 Acres  
Suburban Builders  
Rt 94  
New Windsor, N.Y.

<p>• NEW YORK STATE •</p>  <p>LIC NO 37246</p>	<p><i>Belmont</i> <i>Sub Division</i> <i>Plot</i></p> <p><b>RICHARD G. BARGER</b> P. E. &amp; L. S. NEW HACKENSACK ROAD WAPPINGERS FALLS, NEW YORK</p>	<p>• DRAWING NUMBER •</p> <p>OF _____</p>
<p>DATE _____</p>	<p>SCALE <i>1"=50'</i></p>	<p>DRAWN BY <i>RGB</i></p>
<p>CHECKED BY _____</p>	<p>DATE _____</p>	<p>DATE _____</p>



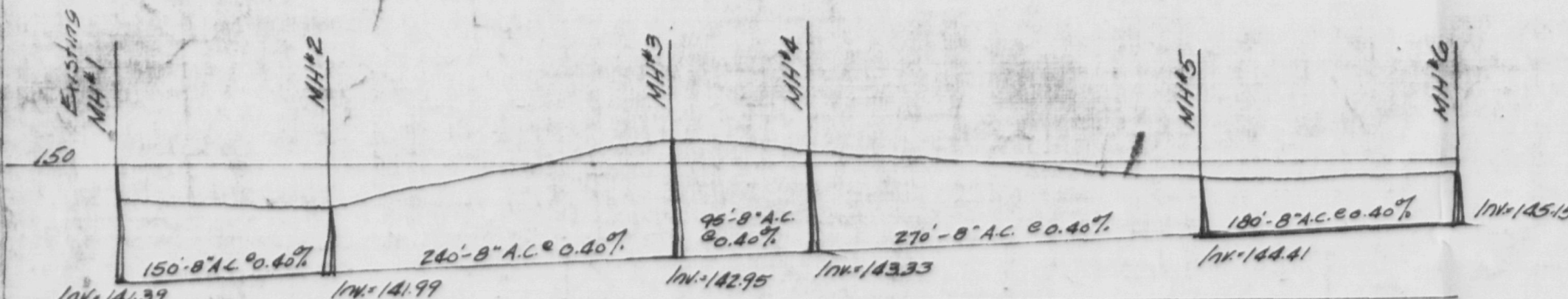


TYPICAL LOT LAYOUT



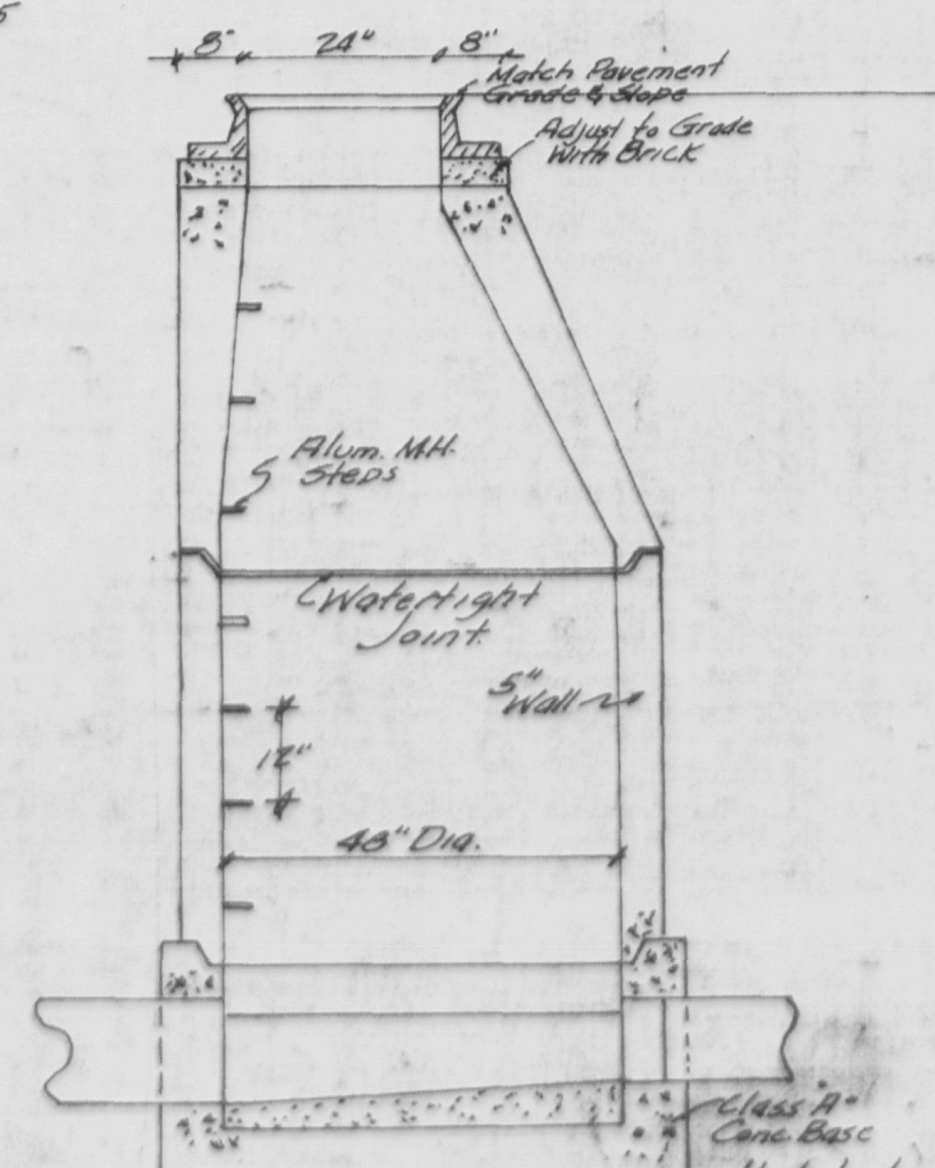
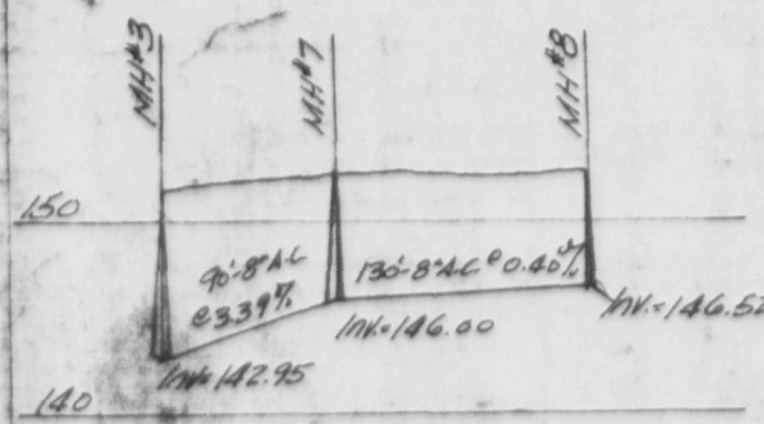
ROAD PROFILE

Scales: Hor. 1"=100'  
Ver. 1"=10'

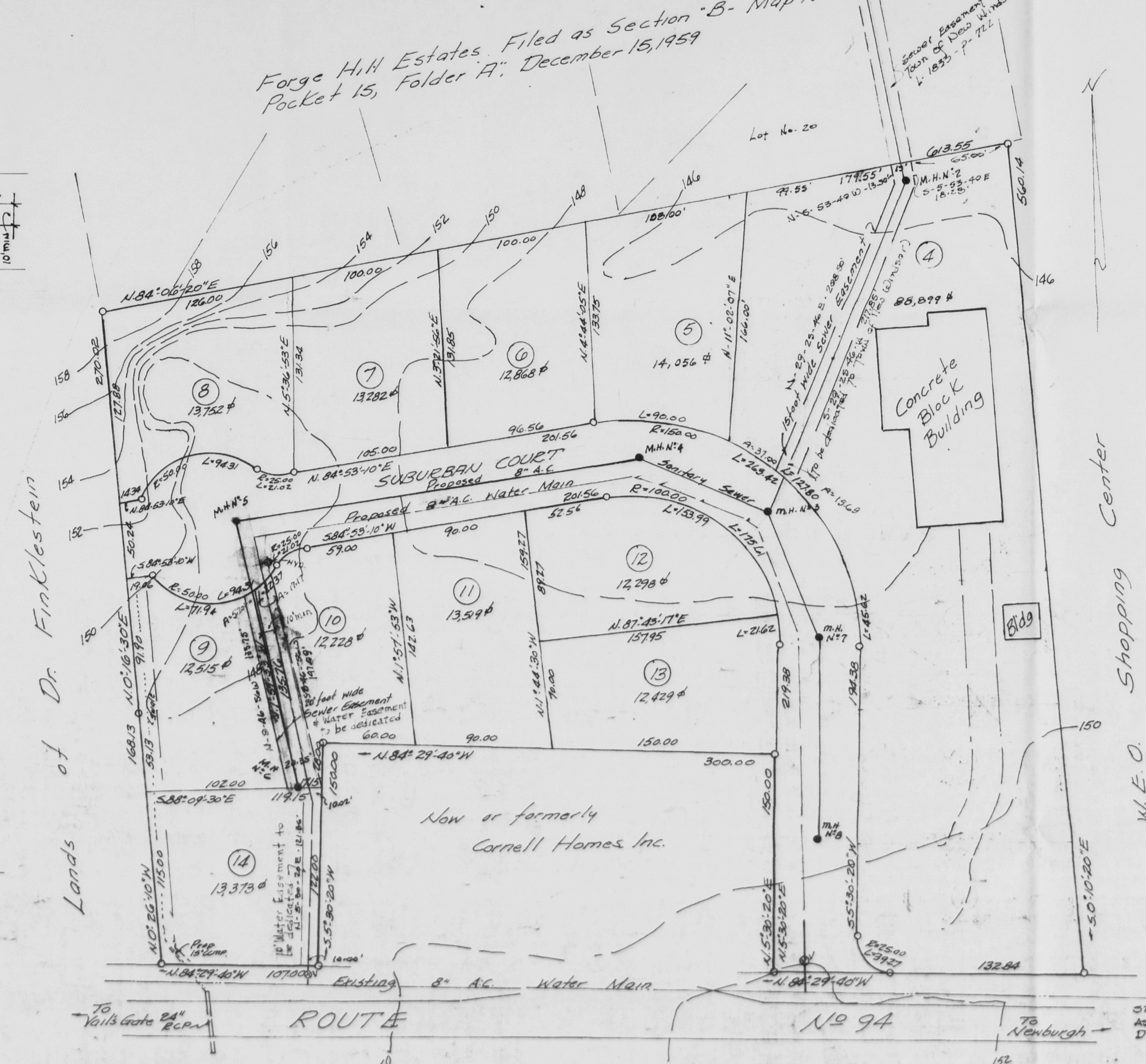


SANITARY SEWER PROFILES

Scales: Hor. 1"=100'  
Ver. 1"=10'



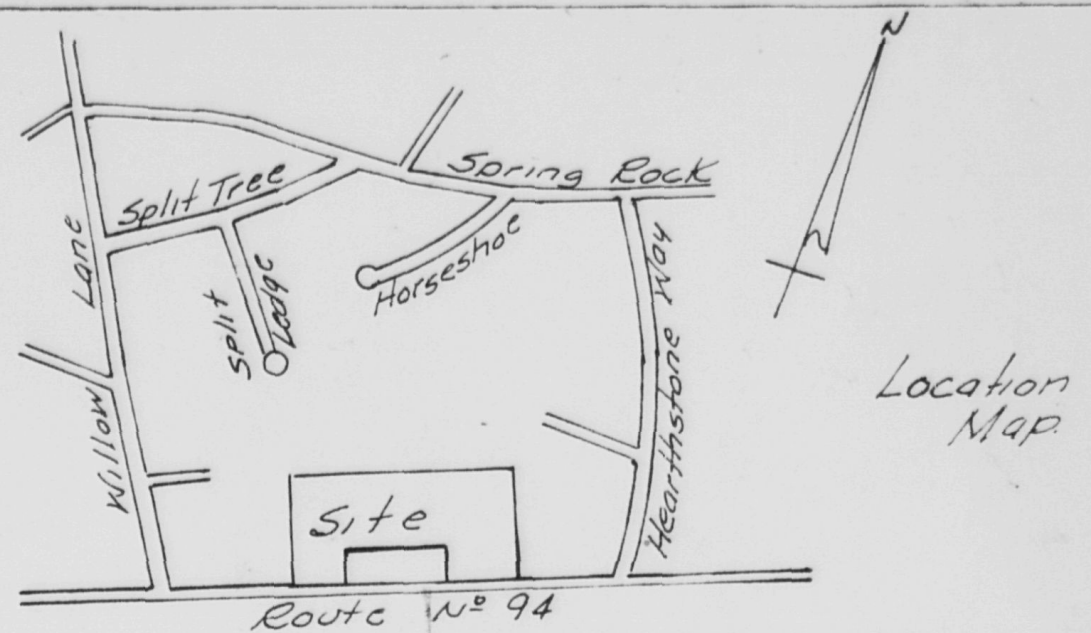
PRECAST CONC. MANHOLE



REVISED 5/9/78 IN ACCORDANCE WITH DEC. REVIEW LETTER OF 2/17/78  
REVISED 9/18/78 IN ACCORDANCE WITH ORANGE COUNTY DEPT. OF HEALTH LETTER - MAY 19, 78. 5/18/78 TO CONFORM TO THE NEW WINDSOR WATER STANDARDS.

REVISION NOTE  
MAP REVISED DEC-17-76 - COMBINED LOTS 12, 13 INTO LOT 12A. RE-ADJUSTED PROPERTY LINE BETWEEN LOTS 4&5 AND REVISED LOT SQUARE FOOTAGE. LOT 12A.  
FILE NO. 7063

CHARLES J. M. EVILLY  
CONSULTING ENGINEER  
4 FAIRVIEW AVENUE  
MIDLEBURN, NEW YORK



Location Map

FINAL SUBDIVISION APPROVAL GRANTED  
BY TOWN OF NEW WINDSOR PLANNING BOARD  
ON NOV. 14, 1978  
BY Lawrence Jones  
Secretary

I, Richard G. Barger certify that this map was made from an actual survey of the property.  
Survey Completed on June 1, 1972.  
Map Completed on September 12, 1972.

Richard G. Barger  
Richard G. Barger P.E. #615 #37240

This is to certify that we Suburban Builders of Route No. 94, New Windsor, New York are the Record Owners of the Property shown on this Plat.

Murray Rotkin  
President

PLAN OF SUBDIVISION

PREPARED FOR  
SUBURBAN BUILDERS

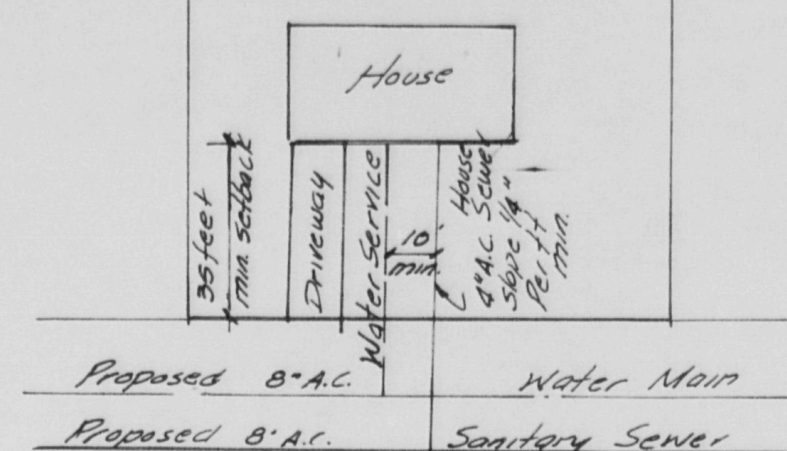
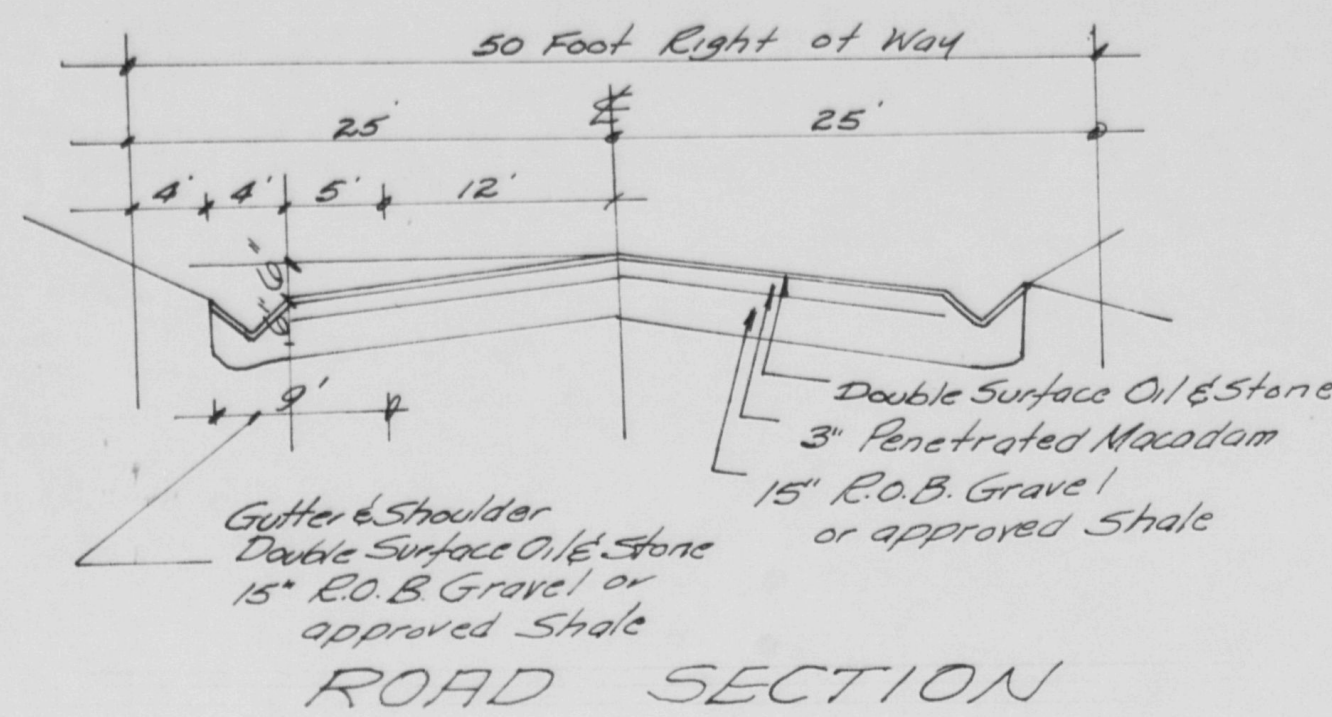
TOWN OF NEW WINDSOR ORANGE CO., N.Y.  
SCALE 1"=50' SEPTEMBER 12, 1972

SHEET NO. 1 OF 2

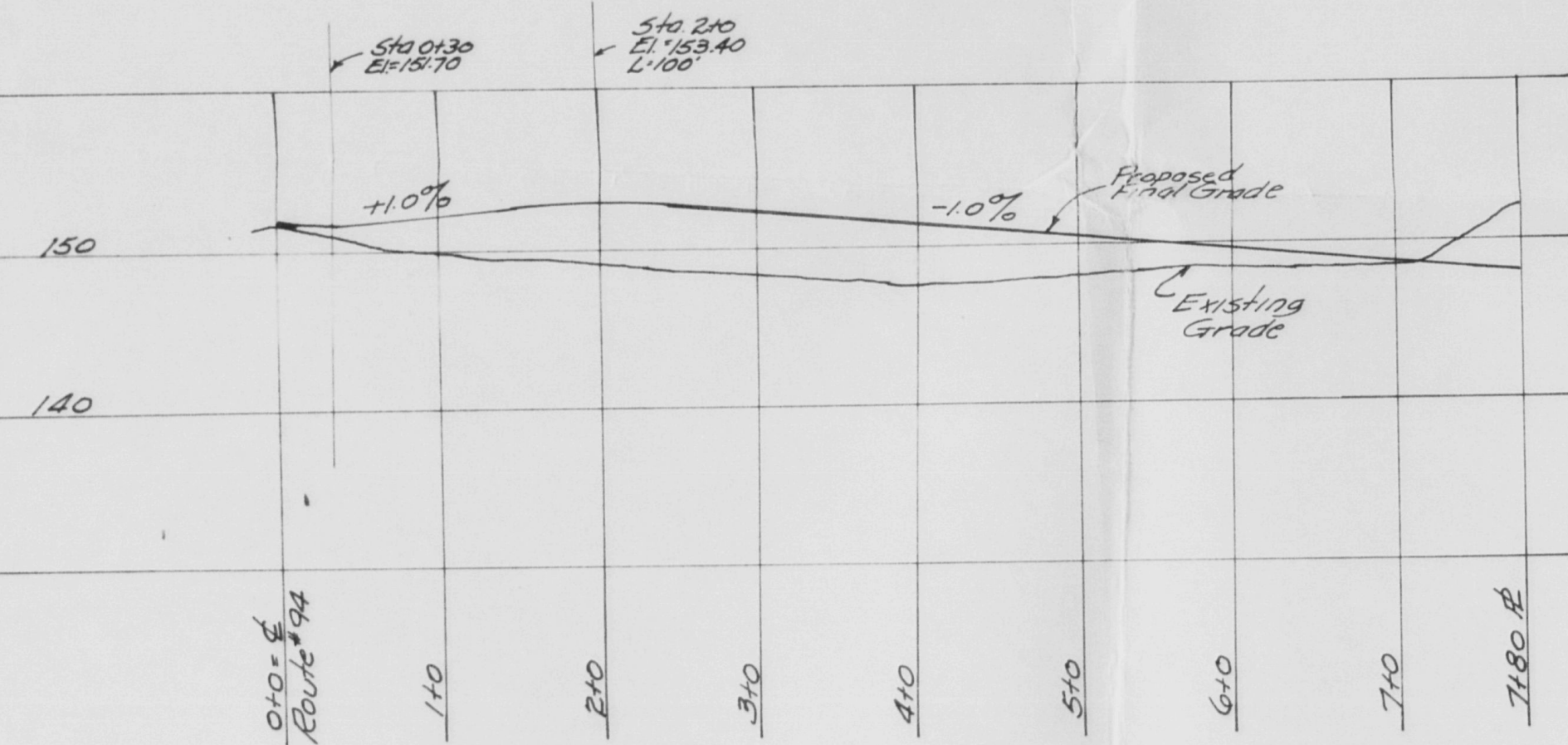
RICHARD G. BARGER P.E. #615  
NEW HACKENSACK ROAD  
WAPPINGERS FALLS, N.Y.



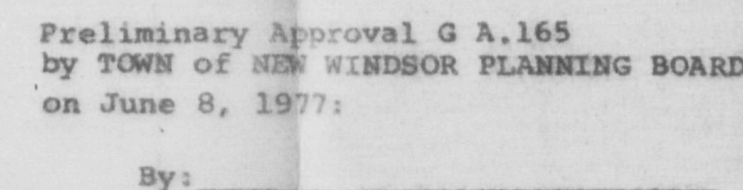
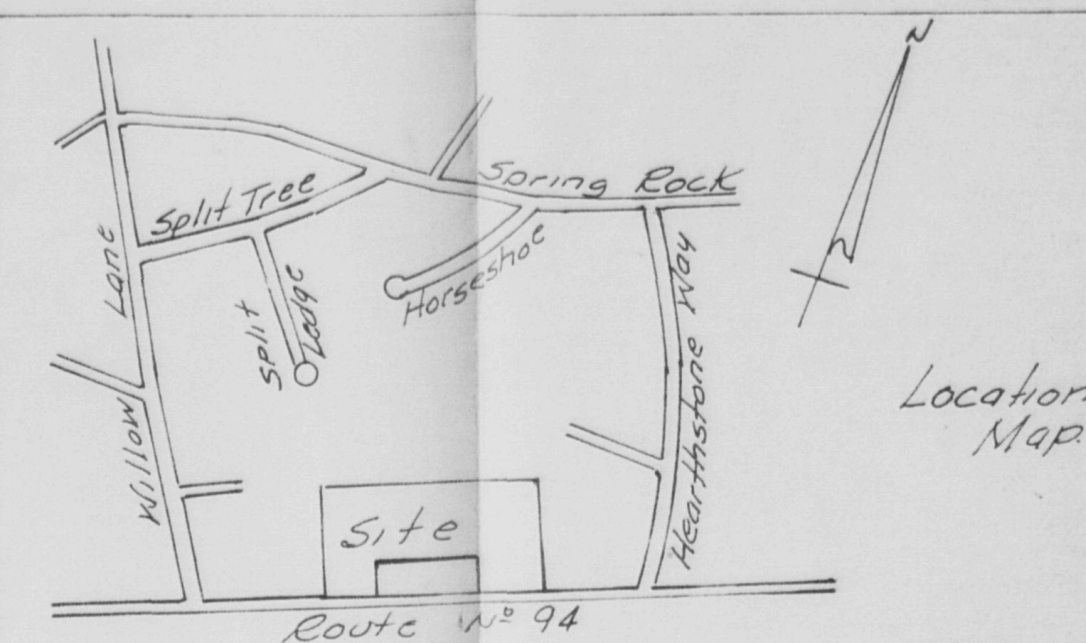
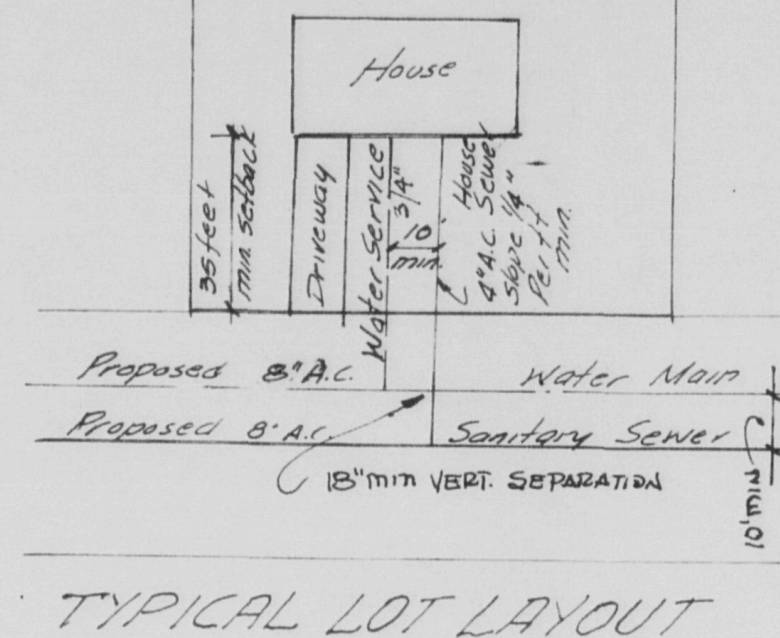




TYPICAL LOT LAYOUT







I, Richard G. Barger certify that this map  
was made from an actual survey of the  
property.  
Survey Completed on June 1, 1972.  
Map Completed on September 12, 1972.

Richard G. Barger  
Richard G. Barger P.E. & L.S. #37246

This is to certify that we Suburban Builders of Route No 94 New Windsor New York are the Record Owners of the Property shown on this Plat.

FINAN SUBDIVISION 4 APPROVAL GRANTED  
BY TOWN OF NEW WINDSOR PLANNING BOARD  
ON SEPT 13 1978

Murray Robin  
President

STATIC PRESSURE - 86 P.S.I.  
AS PER DEVELOPERS LETTER  
DATED 3/1/78

# WATER MAIN PLAN

PREPARED FOR  
SUBURBAN BUILDER

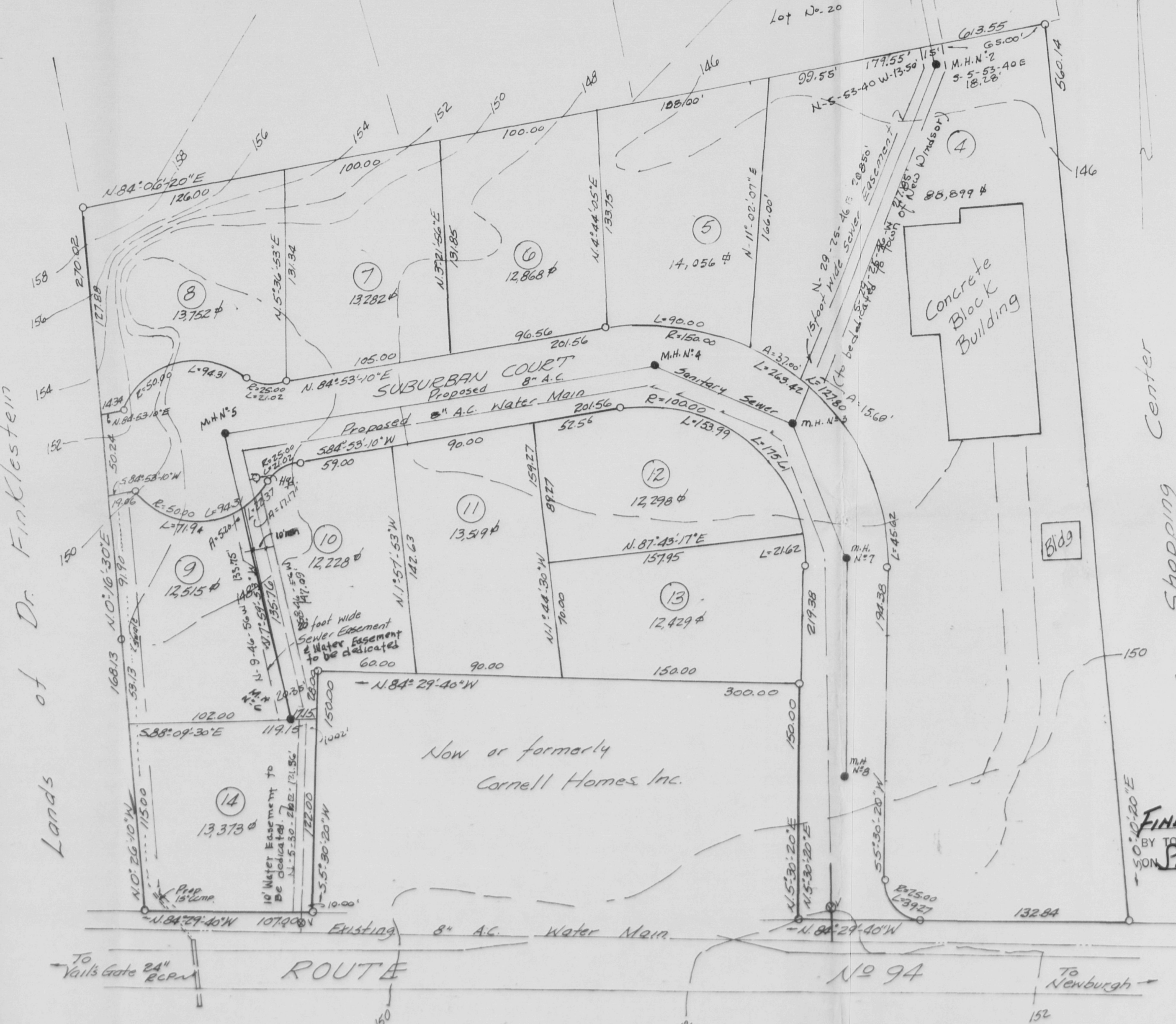
TOWN OF NEW WINDSOR ORANGE CO., N  
SCALE 1"=50' SEPTEMBER 12, 1

SHEET N° 1 OF 2

RICHARD G BARGER PE & LS  
NEW HACKENSACK ROAD  
WAPPINGERS FALLS NY

Professional Engineer & Land Surveyor  
Richard J. Benge  
No. 67246  
State of New York

Forge Hill Estates. Filed as Section  
Pocket 15, Folder A. December 15, 1959



REVISED 3/9/78 IN ACCORDANCE WITH  
D.B.C. REVIEW LETTER OF 2/17/78

REVISED 5/10/78 IN ACCORDANCE WITH  
ORANGE COUNTY DEPT. OF HEALTH LETTER - MAY 19, 78.  
5/24/78 to conform to T.S. New Windsor Water  
Standards.

REVISION NOTE

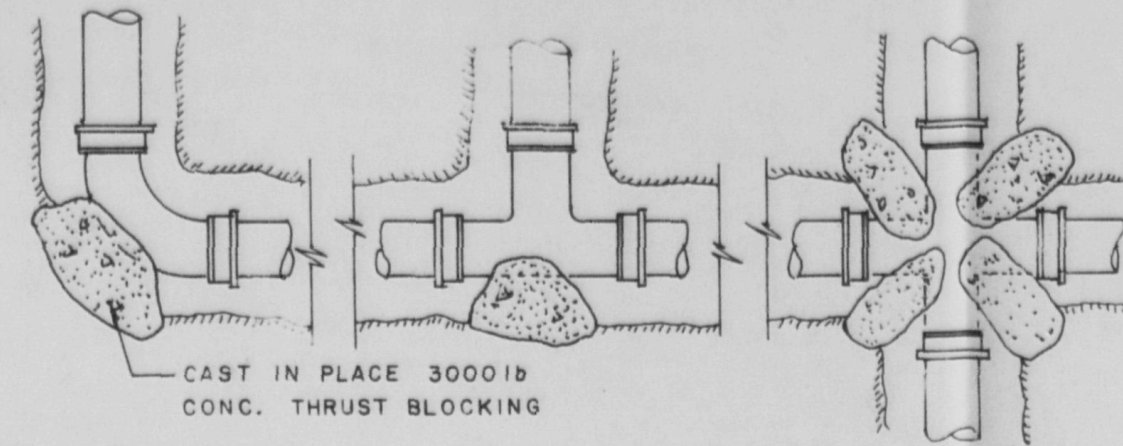
MAP REVISED DEC-17-76 - COMBINED LOTS 1, 2, & 3 INTO LOT N-4. RE-ADJUSTED PROPERTY LINE BETWEEN LOTS 4 & 5 AND REVISED LOT SQUARE FOOTAGE LOT N-4.

CHUMARD & McEVILLY  
CONSULTING ENGINEERS  
4 FAIRLAWN AVENUE  
MIDDLETOWN, NEW YORK

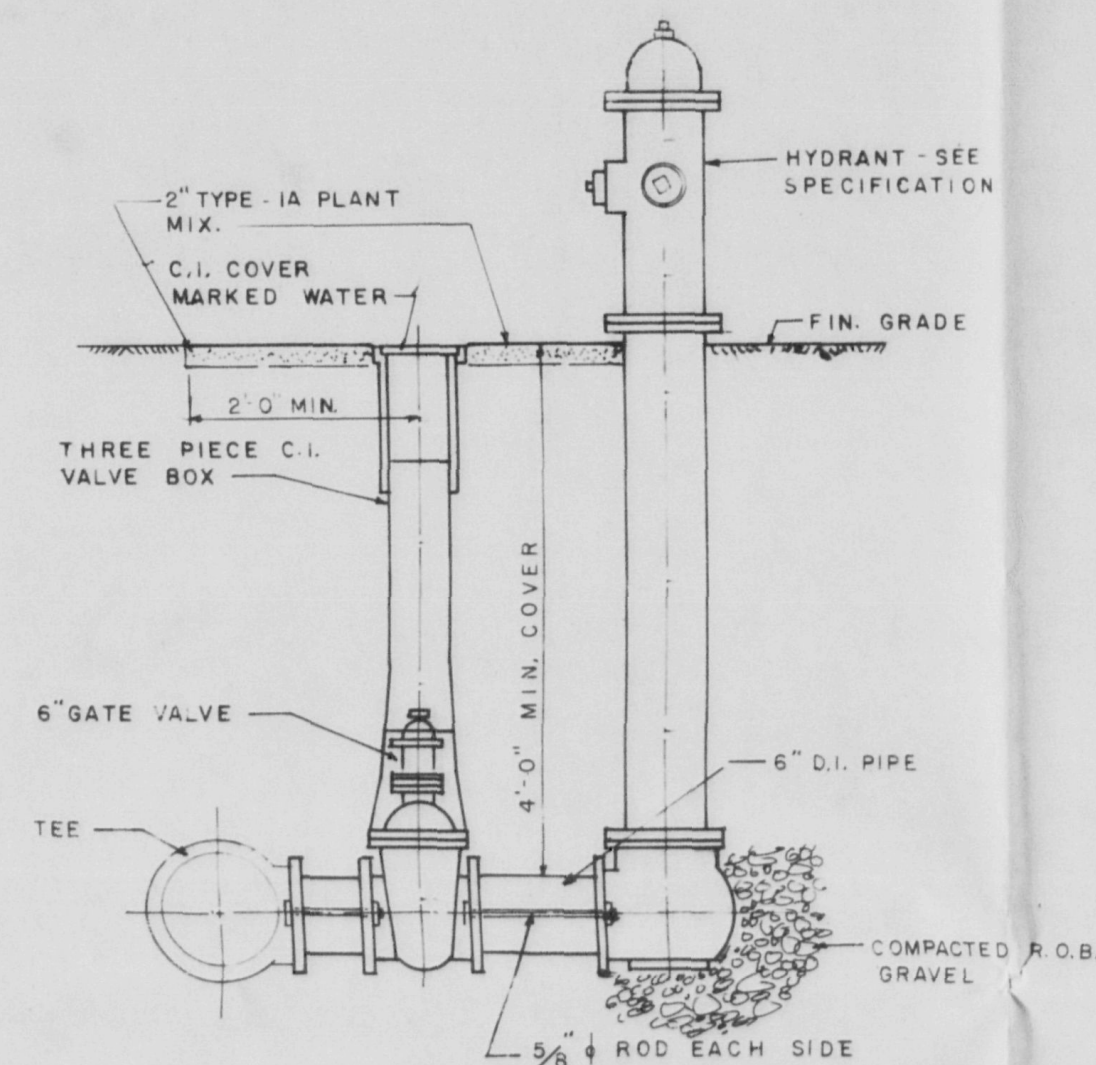
UNAUTHORIZED ALTERATION OR ADDITION  
TO THIS SURVEY MAP IS A VIOLATION OF  
SECTION 7209 (2) OF THE NEW YORK STATE  
EDUCATION LAW

Lab No 72-060

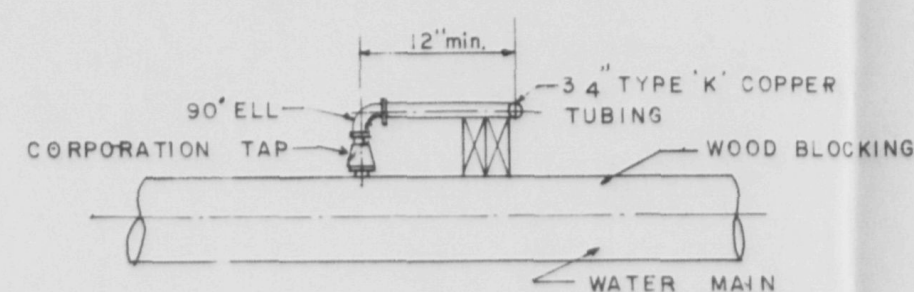




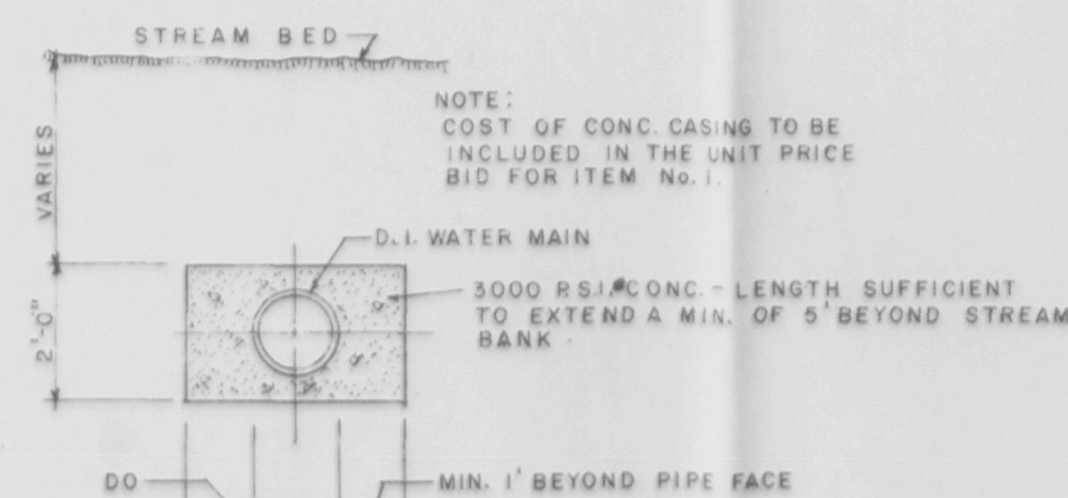
**THRUST BLOCKING DETAIL**



**HYDRANT DETAIL**

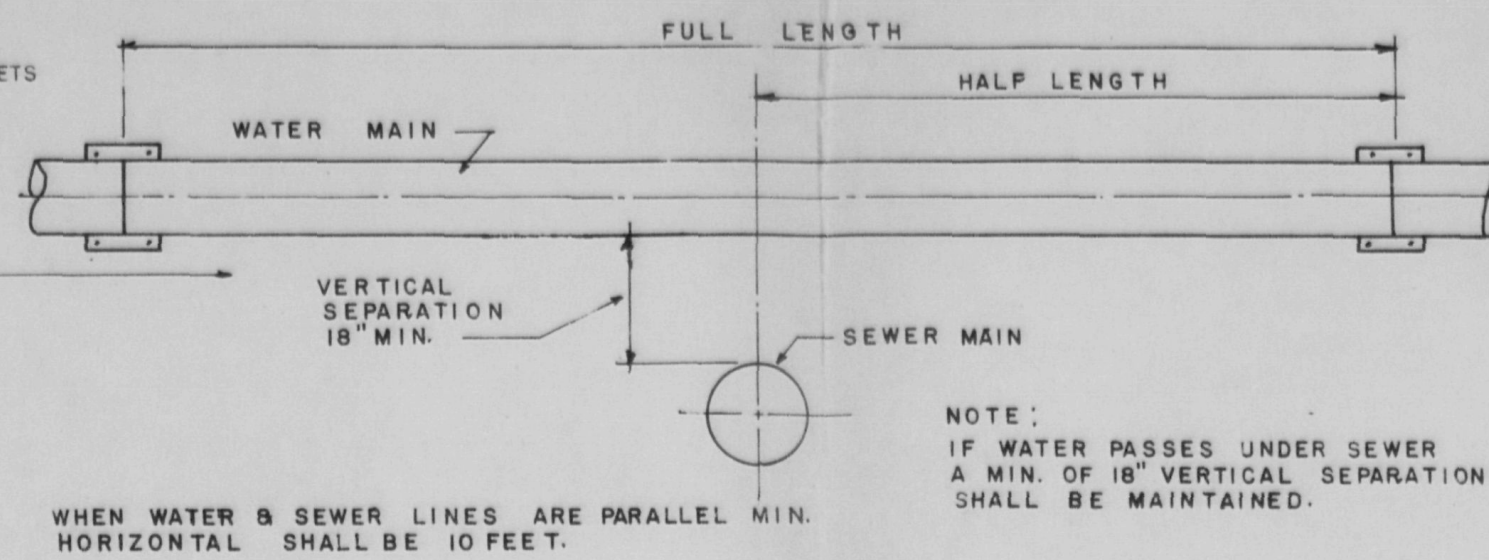


**SERVICE TAP DETAIL**



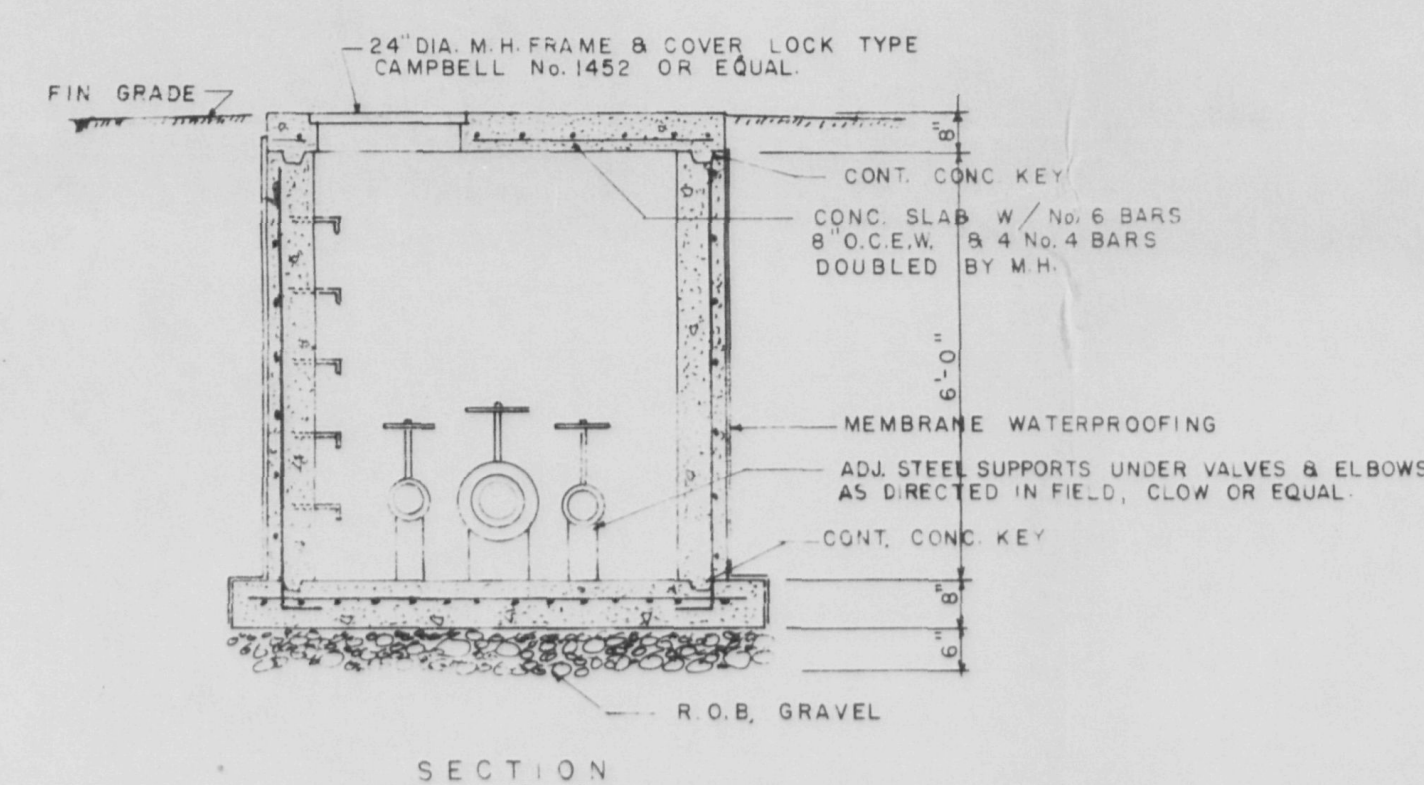
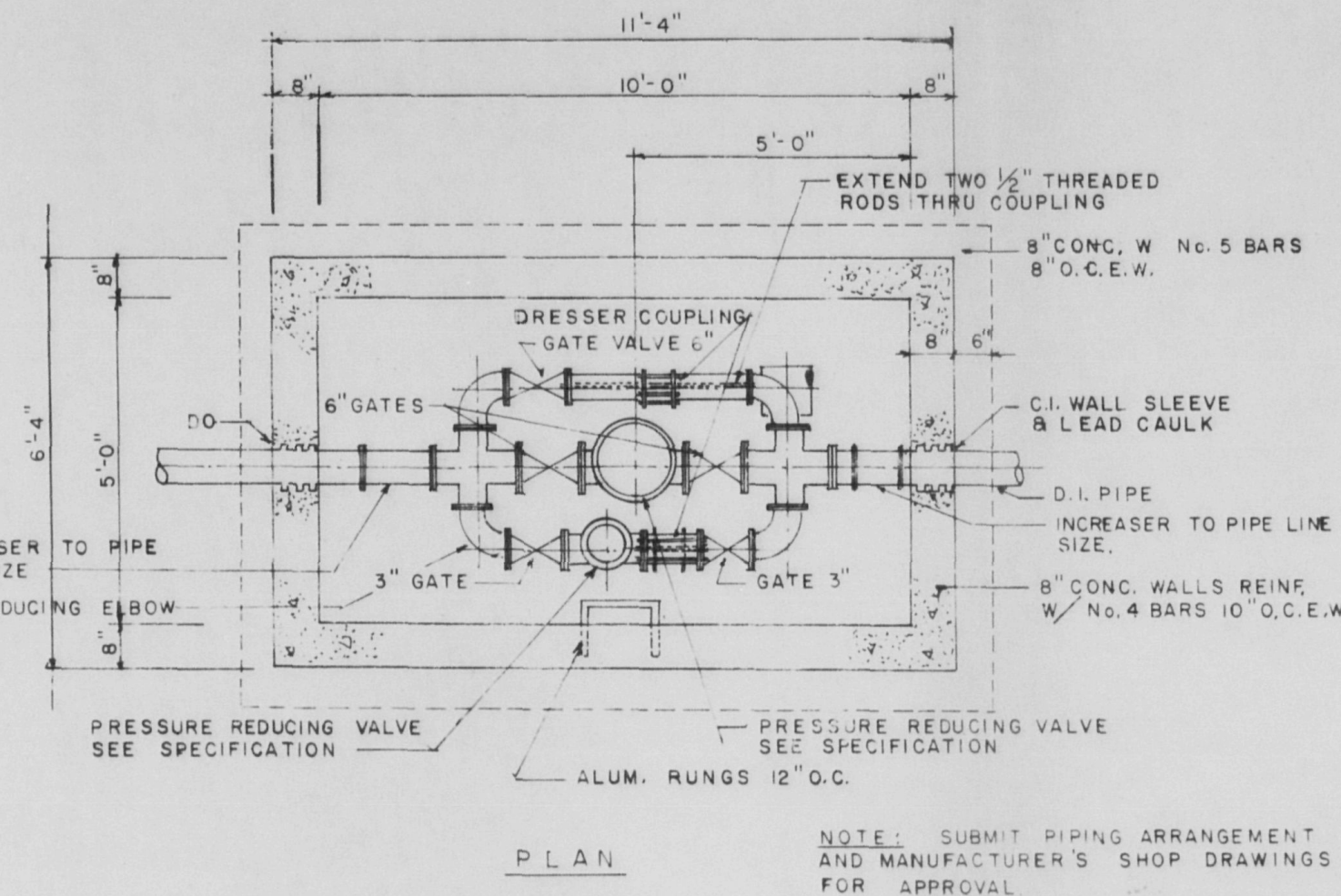
**STREAM CROSSING DETAIL**

NOTE:  
IF A JOINT IS EXPOSED ON EXISTING C.M.P. CULVERTS, THE CONTRACTOR SHALL REMOVE EXISTING CONNECTING BANDS & WRAP THE JOINTS WITH CLOSED CELL NEOPRENE GASKETS SKINNED ALL FOUR SIDES, 7" WIDE X 3/8" THICK ONE PIECE CONSTRUCTION, MANUFACTURED IN ACCORDANCE WITH A.S.T.M. SPEC. D-1096 GRADE SCE-43. REPLACE BANDS, TIGHTEN SUFFICIENTLY TO COMPRESS GASKET.

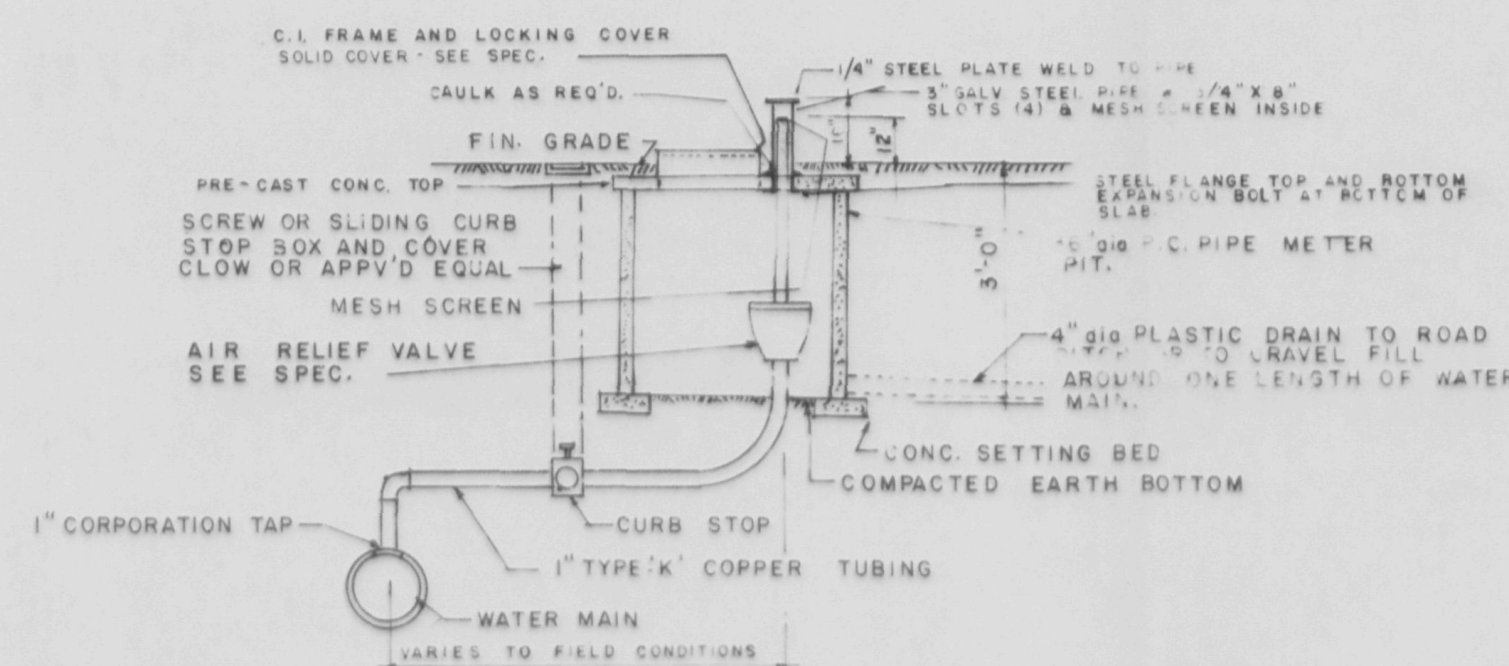


**WATER - SEWER CROSSING DETAIL**

NOTE: CONTRACTOR SHALL PROVIDE ADEQUATE STRUCTURAL SUPPORT FOR SEWERS TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING ON AND BREAKING OF WATER MAINS MATERIAL AND METHOD MUST BE APPROVED BY THE ENGINEER.

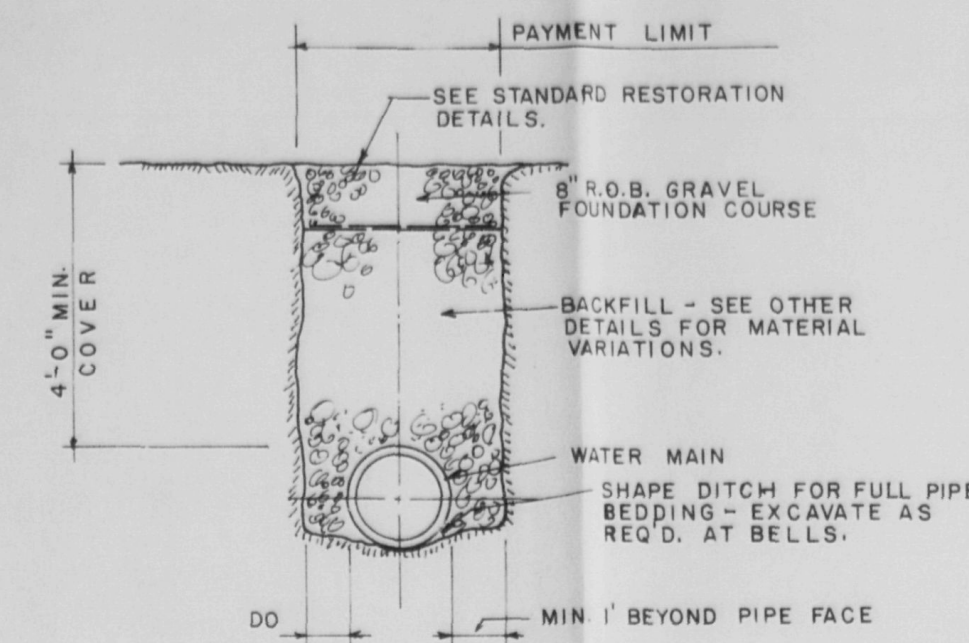


**PRESSURE REDUCING VALVE DETAIL**

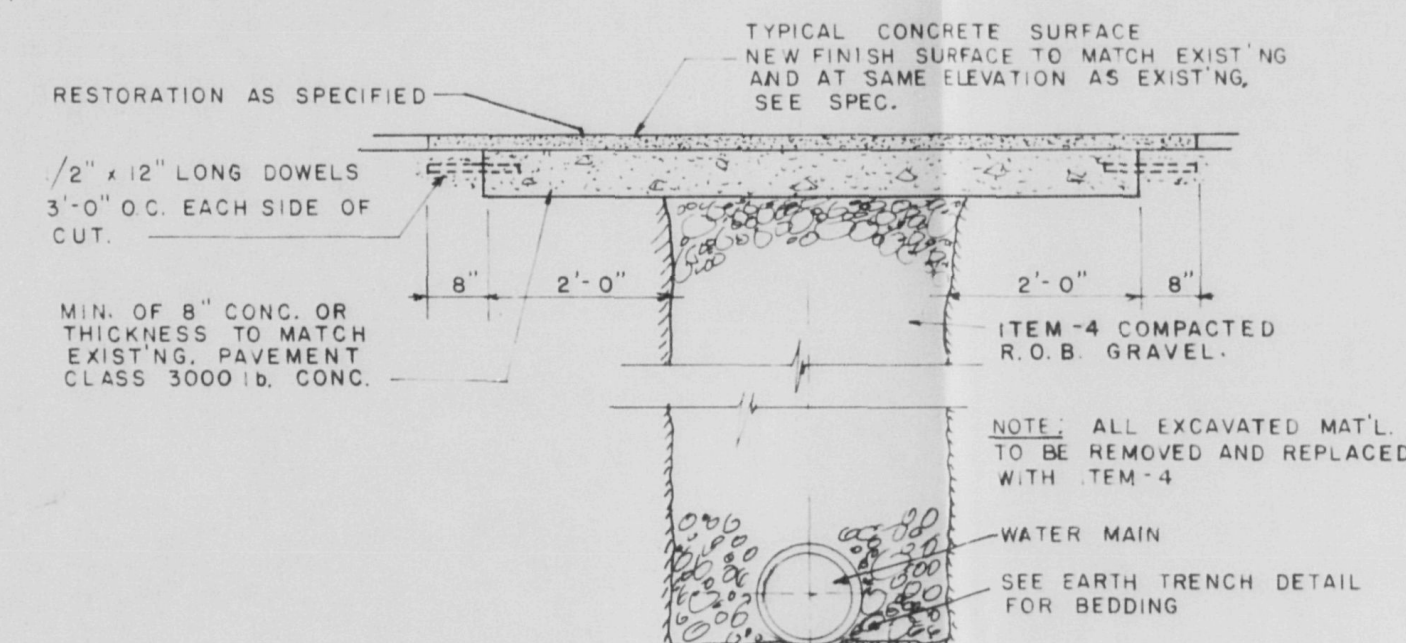


**AIR RELIEF VALVE DETAIL**

REVISED 3/10/75

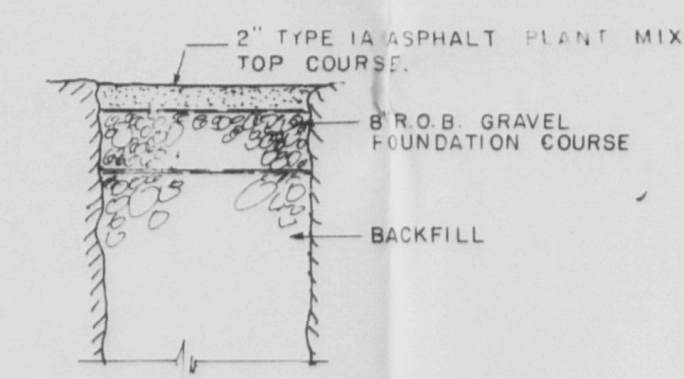


**EARTH TRENCH DETAIL**

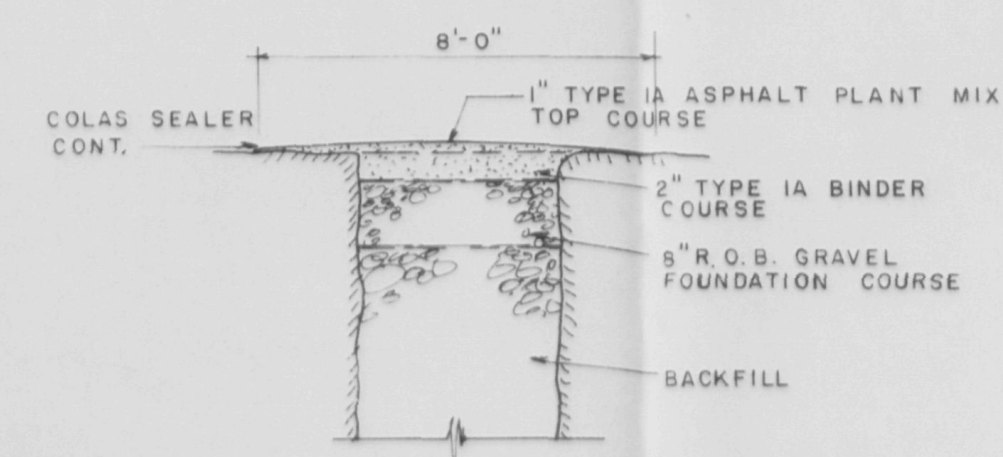


**HIGHWAY CROSSING DETAIL**

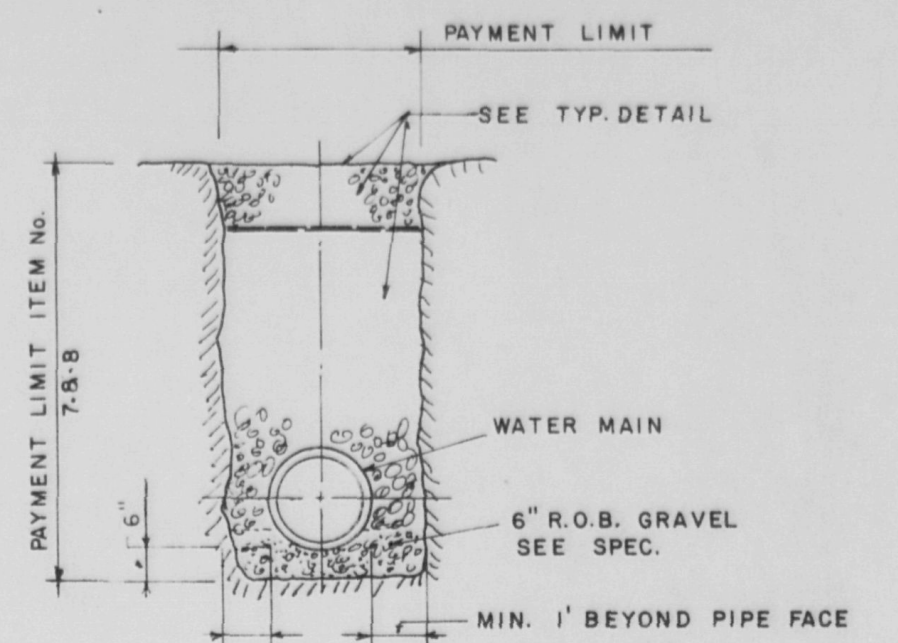
NOTE: IF EDGE OF TRENCH CANNOT BE EVENLY CUT, THEN ROAD SURFACE ADJACENT TO DITCH MAY BE SPRAYED WITH COLAS SEALER OR EMULSION AND THE 2\"/>



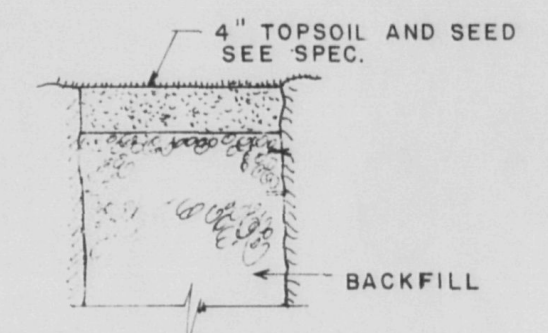
**ASPHALT TRENCH DETAIL**



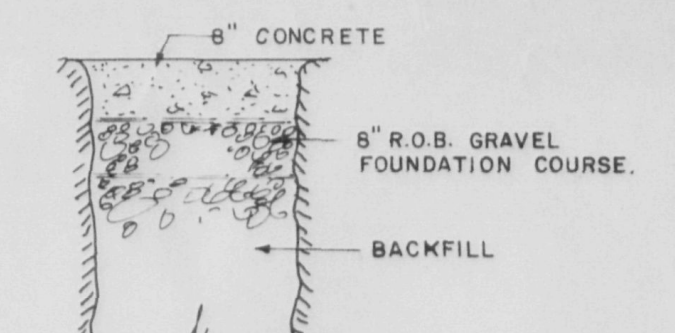
**TWO COURSE ASPHALT TRENCH DETAIL**



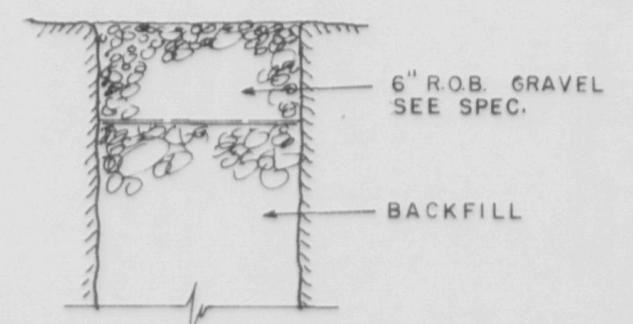
**ROCK TRENCH DETAIL**



**TRENCH SEEDING DETAIL**



**CONCRETE TRENCH DETAIL**



**GRAVEL TRENCH DETAIL**

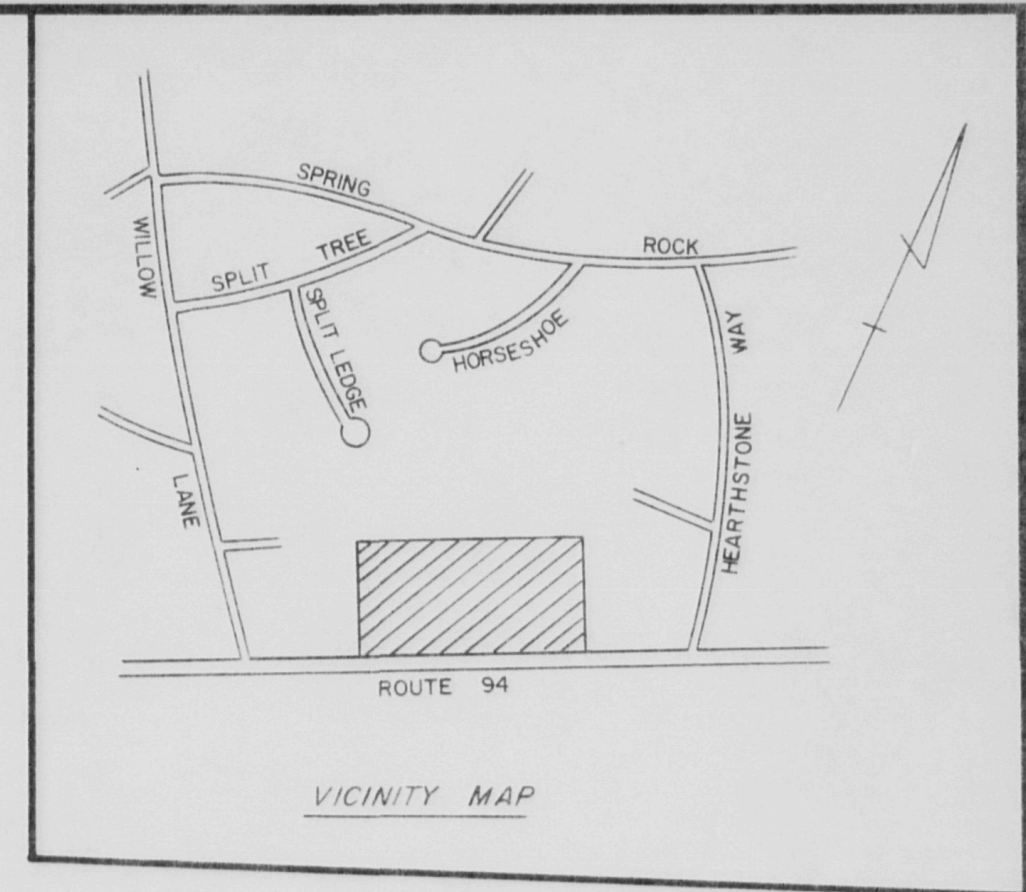
GENERAL NOTE:  
THE ABOVE DETAILS ARE FOR GENERAL USE AS REQUIRED. BIDDER IS ADVISED TO REVIEW THE CONTRACT DRAWINGS FOR ALL APPLICABLE DETAILS, AND DELETE THOSE NOT SO CONTAINED, ALSO SEE PROPOSAL ITEM IN SPECIFICATION.

<b>CHUMARD &amp; McEVILLY</b> CONSULTING ENGINEERS		4 FAIRLAWN AVENUE MIDDLETOWN, NEW YORK	
		reference sheet no. 2 of 2	
		<b>STANDARD WATER MAIN DETAILS</b>	
drawn by R.W.G.	checked by W.C.	date MARCH 75	scale N.T.S.
file no. 7653			

REV. AUG. 1976 NOTE ITEM No. 11 DETAIL.  
REV. MAR. 1976 C.M.R. NOTE WATER SEWER CROSSING DETAIL  
REV. FEB. 1976 WATER SEWER CROSSING DETAIL  
REV. OCT. 3, 1975 THRUST BLOCKING, PRESSURE REDUCING VALVE  
HIGHWAY CROSSING DETAIL



FORGE HILL ESTATES  
FILED AS SECTION "B" MAP #1848  
POCKET 15, FOLDER A, DEC. 15, 1959



SHOPPING CENTER  
(W.E.O.)

TOTAL AREA = 7 009 ± ACRES



RECEIVED, TOWN OF NEW WINDSOR  
PLANNING BOARD, 3/8/72  
BY *[Signature]*

THIS MAP IS CERTIFIED ACCURATE  
AND CORRECT, *[Signature]*  
BEN KITTLER, JR., N.Y. LIC. 45691

TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK				
REVISIONS		SUBDIVISION FOR		DRAWN
		CORNELL HOMES, INC.		J.C.V.
				EXAMINED
				APPROVED
				FILE NO.
				DRAWING NUMBER
		1" = 50'	DATE	OR
			FEB. 5, 1972	